INTRODUCTION

A master plan, simply stated, is a town's development plan and land use policy. It assesses existing resources and projects future growth. Perhaps more importantly, it is a planning tool which can be used to answer questions of policy such as – Where should development occur? Ultimately, a master plan is a strategy for the Town's future, which sets the framework for the implementation of specific programs, policies, and regulations designed to achieve the Town's goals and objectives.

The description and purpose, as well as details concerning the preparation and adoption of the master plan, are set forth in New Hampshire state law at RSA 674:2-4. Concisely put, the definition states that:

> "The master plan shall generally be comprised of a report or set of statements and land use and development proposals with accompanying maps, diagrams, charts and descriptive matter designed to show as fully as is possible and practical the planning board's recommendations for the desirable development of the territory legally and logically within its planning jurisdiction." (NH RSA 674:2)

The adoption of a master plan is essential for several reasons. First, a master plan is a legal pre-requisite to the adoption of a zoning ordinance. Specifically, under New Hampshire law (RSA 674:18) a planning board must adopt the general statement of objectives and the land use section of the master plan before a municipal zoning ordinance is adopted. Further, according to NH RSA 674:22, communities which wish to engage in regulating the timing of development through the establishment of growth limitations, must have adopted both a master plan and a capital improvements program. Recent case law decisions further support the master plan as a document of critical importance for municipal zoning and planning.[1] Thus, a master plan is one of the cornerstones of an effective and legally defensible growth management strategy.

This document is comprised of two major components. The first consists of an inventory and analysis of existing physical, economic, and social conditions as well as predictions about trends. More specifically, this component provides a survey of existing land use, natural resources, and community facilities; an overview of recent economic, demographic, and housing trends; and a projection of future needs in each of these important areas. It serves to document and identify both the Town's assets and its problem areas.

Ultimately, the first component serves as the basis for the second component, a set of goals and objectives which are targeted to address each important feature of the Town, including housing, transportation, natural resources, education, and community facilities,

[1] See Kostreles v. Portsmouth, 104 N.H. 392, 187 A.2d 789, 1963 and Treisman v. Town of Bedford, 132 N.H. 54, 563 A.2d 786, 1989.

to name a few. The goals and objectives were developed from the community survey results and truly reflect the desires of the entire community. These goals and objectives serve as the basis for developing a sound future land use policy and growth management strategy as well as for implementing specific programs, policies, and regulations for guiding the Town's future development.

New Boston Speaks

This Master Plan is a direct result of New Boston Speaks. In March of 2004, 185 residents attended "New Boston Speaks", the Town of New Boston's Community Profile facilitated by the University of New Hampshire Cooperative Extension. During the two day event, New Boston was evaluated by the residents in its current state, and a vision of what it should look like in the future was discussed.

Eight Key Issues were identified by the residents. These issues include: Transportation and Road Safety, Economy and Local Tax Base, Citizen Participation, Lifelong Education, Human/Recreational Services, Village and Community Character Projects, Preservation of Natural Resources, and Planning/Zoning/Growth.

As a result of the discussions, six action groups were formed, Village District Preservation/Rural Character, Foot Traffic and Road Safety, Planning/Zoning/Growth, Multi-use Conference Center, Middle School, and Community Coordinator. The Planning/Zoning/Growth group grew into the Master Plan Steering Committee, as sanctioned by the Planning Board. The goal was to update this Master Plan in accordance with the results of New Boston Speaks, input from other action groups, and continued input from the residents of New Boston.

In order to better evaluate the desires of the residents, the Master Plan Steering Committee developed a questionnaire, and sent it to approximately 2,000 residents and land owners in New Boston. There were over 500 responses, and the committee used them, and the information from New Boston Speaks to write the Goals and Objectives of the Master Plan. These Goals and Objectives were the basis for the writing of the body of the Master Plan. In April of 2006, the committee again called on the residents of New Boston to come together and discuss key points regarding Housing/Population, Transportation, Natural Resources, Economic Development, and Land Use in New Boston. The principles discussed, and ideas generated further guided the committee in final preparations of the Master Plan.

Town officials should keep in mind the Goals and Objectives during their day-to-day operations. More importantly, these Goals and Objectives, and the body of the Master Plan should be a guide to plan for the future, update existing regulations and ordinances, and create town budgets.

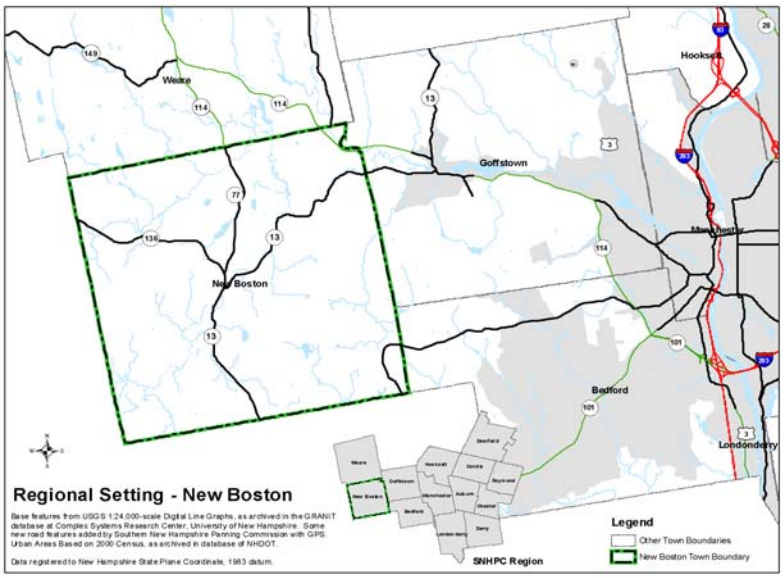
REGIONAL SETTING

The Town of New Boston is located in the south-central portion of New Hampshire in Hillsborough County, approximately 24 miles southwest of Concord, 17 miles west of Manchester, and 21 miles northwest of Nashua. Adjacent communities consist of the towns of Weare, Goffstown, Bedford, Amherst, Mont Vernon, Lyndeborough, and Francestown. Figure 1 below depicts New Boston's geographic relationship to nearby New Hampshire and Massachusetts urban centers.

The Town of New Boston encompasses a total of 27,648 acres or approximately 43.2 square miles. Primary highway access is provided by New Hampshire Route 13, which connects New Boston with Goffstown to the east, Concord to the northeast, and Mont Vernon and Milford to the south. Access is also provided by New Hampshire Routes 136 and 77, which connect with Francestown and with Weare and Concord respectively.

The town is part of the Greater Manchester Chamber of Commerce Initiative, known as "The Metro Center," which is a conglomerate of 14 communities, including the City of Manchester and its neighbors. The initiative is a partnership with the Chamber and the NH Department of Resources & Economic Development (NHDRED) and aims to promote economic development on a regional level. The Metro Center contains some of the state's fastest growing residential, commercial, and industrial areas. Although New Boston is experiencing significant growth, it remains one of the more rural towns within the Metro Center and the Southern New Hampshire Planning Commission region. Based on current growth patterns, New Boston will continue to fulfill the role of a residential bedroom community with strong reliance upon residential property taxes for municipal income.

Figure 01
Regional Setting



HISTORICAL SETTING

Through the years, New Boston has been known variously as "Lanestown," the "Friendly Town," the "Gravity Center," and the "Child of Londonderry," but the name New Boston was probably derived from the fact that the original grant was given to John Simpson and 50 other men from Boston, Massachusetts. On May 28, 1735, the Massachusetts General Court granted these men six square miles of land. However, their crude settlement of sixty log houses in the "Plains" was soon abandoned because of Indian harassment. Under a new charter, a second and more successful settlement was begun in 1751. This new charter granted a twelve-square-mile area, but the second six square mile portion - the so-called "addition" located in the Scobie Pond area - was annexed to Francestown in 1771.

The Town of New Boston was incorporated on February 18, 1763. Many of its earlier settlers, primarily of Scotch-Irish descent, came from the Town of Londonderry. By 1767 New Boston's population had grown to 296. After the Revolutionary War, New Boston experienced an influx of English settlers from such areas as Beverly, Salem, Windham, and Topsfield, Massachusetts.

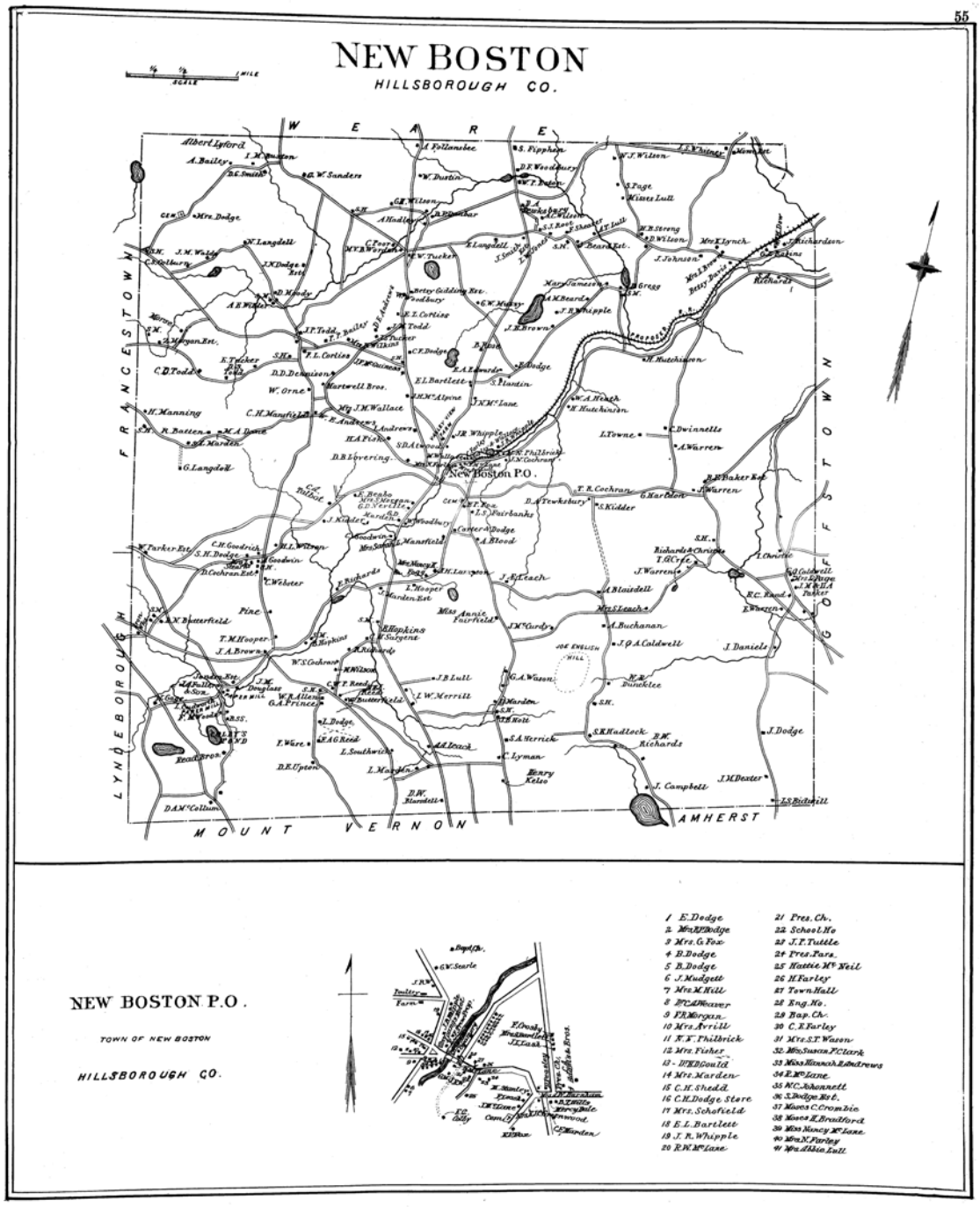
New Boston's early population peaked at 1,686 in the year 1820 and then began a steady decline, eventually bottoming out at 693 people in 1930. During the period 1830 to 1930, the town's population fell by approximately 100 persons every 10 years. During the nineteenth century, farming was an important economic activity and the predominant land use. In 1860, for example, 170 dairy farms were in operation. As farming declined, prominent hills such as Meetinghouse, Cochran, Wilson, South, Hooper, and Clark were in great demand as sites for summer boarding houses.

The Piscataquog River (the Middle Branch in the northern part of town, and the South Branch bisecting the town diagonally from southwest to northeast) provided the energy source which contributed to the rise of early local industries. As early as 1735, saw and grist mills were in operation on the Piscataquog's Middle and South Branches. By the 1820's, at the height of local water power production, nine mills were in operation on each branch. There have been as many as 33 saw mills and various other businesses in operation including a hydroelectric plant; paper, shingle, threshing and carding mills; and piano frame, box, and furniture factories.

The local economy has experienced many ups and downs. The largest slump in the economy was probably felt when half the village was destroyed by the fire of May 11, 1887, started by sparks from the "kit" barrel factory and fanned by high winds. However, through the support of J. Reed Whipple and his famous Valley View Farms, the Creamery, and the building of the New Boston Railroad, the economy improved. Whipple was a New Boston native who, at the time of his death in 1912, was the owner of Young's, the Touraine, and the Parker House in Boston, Massachusetts. The railroad, built along the north bank of the South Branch of the Piscataquog River in 1894, principally served the Whipple Farms operation. The farm, once key to New Boston’s economy, was finally sold at auction in 1920, and the railroad was abandoned in the early

1930's, at the time of the "Great Depression." In 1942, a bombing range was established by the government and was later turned into the USAF Satellite Tracking Station.

Figure 02
Historic Street Map



GOALS AND OBJECTIVES

The state statute that enables municipalities to prepare master plans, RSA 674:2, Master Plan Purpose and Description, provides for the inclusion of, "A vision section that serves to direct the other sections of the plan. This section shall contain a set of statements which articulate the desires of the citizens. . ." upon which the plan is based. In most of New Hampshire that directive is interpreted to be a statement of goals and objectives for the future growth and development of the community. This update of the Master Plan for the Town of New Boston will follow that tradition. A general Vision Statement for the Master Plan will be presented herein, supplemented by goals and specific objectives for the following sections of the Master Plan: Land Use, Commercial Development, Industrial Development, Agricultural Protection, Town Center**,** Housing, Smart Growth, Transportation, Livable, Walkable Community, Community Facilities, Conservation and Natural Resources, Historical and Cultural Preservation, Earth Products Usage, and Forest Resources.

The development of goals and objectives was initiated at New Boston Speaks, held on April 2, and 3, 2004, which was facilitated by the UNH Cooperative Extension in partnership with the Town of New Boston. An open committee was subsequently formed to update the Master Plan, and met at regular publicized meetings in 2004, 2005 and 2006. The committee was further informed by a questionnaire sent to approximately 2,000 addresses, and distributed at various commercial establishments in New Boston. This process was completed in December, 2005 with 503 responses. With the assistance of Southern New Hampshire Planning Commission, sections of the Master Plan were re-written to reflect the input from the citizens of New Boston.

Vision Statement

The goal of this Master Plan is to guide and direct the future growth and development of the Town of New Boston, while preserving and protecting a rural quality of life. This will be done through the implementation of sound land use policies.

Overall Objectives

1. To guide physical and economic development in accordance with majority vision of maintaining the traditional character of New Boston.

2. To protect and conserve the Town's natural, historical, cultural, and environmental resources.

3. To provide a legal and philosophical foundation for the Town's land use regulations.

4. To ensure that the fiscal impacts of growth and development can be accommodated.

Land Use Goal

To guide and promote a pattern and arrangement of commercial, industrial, residential, and agricultural land use consistent with the physical, social, economic, aesthetic, and environmental needs and desires of the citizens of New Boston, and with the requirements of relevant State and Federal laws and regulations.

Land Use Objectives

1. To continue to refine the Town's Personal Wireless Service Facilities Ordinance to keep pace with technological change.

2. To continue to refine the Town's open space/cluster development regulations and other innovative land use techniques.

3. To encourage, develop and maintain wildlife corridors.

4. To investigate means of protecting land on both sides of River Road and along the Piscataquog River and its branches.

5. To create and adopt a growth management ordinance.

6. To create and adopt an open space ordinance including a requirement for open space in all major subdivisions.

7. To encourage preservation and maintenance of fields, forests, wetlands, mountain tops, hillsides, river views, river front, river beds, and stone walls through such strategies as transfer of development rights and density credits.

8. To continue to refine and enhance the existing sand and gravel regulations balancing environmental and commercial concerns.

9. To conduct a Cost of Community Services Study.

10. To consider implementing new zoning districts based on performance zoning.

11. To investigate the creation of additional village districts.

12. To investigate and implement where appropriate a transfer of development rights program and the use of density credits.

Commercial Development Goal

To promote limited commercial development consistent with the Town's needs and desires and in keeping with the Town's rural character and ability to provide services.

Commercial Development Objectives

1. To continue to refine the Town's ordinances and regulations to make them proactive regarding site design aesthetics for future commercial development in Town.

2. To provide for small scale retail uses and services strategically located to benefit residents of diverse geographic areas within town.

3. To encourage home businesses in areas where appropriate and subject to applicable guidelines.

4. To establish an economic development committee to provide a forum for discussion of local economic issues, and to explore strategies such as inubator space and tax increment finance districts.

Industrial Development Goal

To evaluate limited light industrial development potential for the Town of New Boston.

Industrial Development Objectives

1. To evaluate sites for industrial uses which have suitable development potential and good transportation access.

2. To evaluate industrial uses which will not adversely affect the environmental or historic character of the town, create excessive noise, traffic or light pollution, and which are appropriate in terms of scenic values.

Agricultural Protection Goal

To preserve, promote and expand suitable opportunities for diverse agricultural and related operations and activities.

Agricultural Protection Objectives

1. To ensure that all municipal ordinances protect the right to farm by avoiding requirements that inhibit farming operations, per RSA 672:1, III-b.

2. To develop regulations that ensure the town continues to support farming and agriculture.

3. To investigate legal, financial, and any other approaches to preserve and protect agricultural areas such as adopting a locally administered transfer of development rights program.

4. To conduct an agricultural profile of the community.

5. Promote awareness through public education of agriculture, conservation, forestry, water conservation, etc.

6. To consider establishing an Agriculture Committee to make recommendations to the Town, similar in function to the Forestry Committee.

Town Center Goal

To provide a mix of mutually supportive uses, both business and residential, that will enhance and perpetuate the Town Center's role as a gathering place, commercial and municipal center, and hub of community activities. The intent is to serve local, regional and visitors' markets within a pedestrian-oriented environment, while ensuring compatibility with the existing community character and heritage.

Town Center Objectives

1. To further investigate the concept of establishing a village district.

2. To investigate and create innovative, alternative parking options in the village.

3. To preserve the rural, small town character of the Town Center in keeping with its Victorian heritage and other architectural styles.

4. To investigate the feasibility of establishing a municipal water system and either a municipal sewer system or common septic systems to serve the Town Center.

5. To encourage the establishment and maintenance of green spaces, open spaces, and landscaped areas in the Town Center and linkages between them.

6. To work with the NHDOT to reduce pedestrian and vehicular conflicts, and to improve pedestrian safety.

7. To develop safe pedestrian walkways in accordance with the recommendations of the Livable Walkable Communities study.

8. To investigate ways to control noise, exhaust and light pollution in the village.

9. To investigate funding options such as Community Development Block Grants and the Main Street Program.

Housing Goal

To encourage housing consistent with the small town, rural character of New Boston while offering a range of residential living opportunities.

Housing Objectives

1. To allow for a range of housing types and choices within the Town's land use regulations.

    a. To continue to permit multi-family dwellings of an appropriate design and scale for the Town.

    b. To offer opportunities for low and moderate-income housing and to strive to attain New Boston's fair share of the regional affordable housing need.
    c. To investigate appropriate areas for senior housing development.

2. To investigate the possibility of allowing accessory apartments in buildings other than existing single-family homes.

3. To encourage a variety of housing options, including open space residential development.

4. To explore build-out densities as they relate to current zoning, in order to predict appropriate zoning modifications.

Smart Growth Goal

To investigate the possibility of adopting Smart Growth principles that encourage traditional compact settlement patterns to efficiently use land, resources and infrastructure.

Smart Growth Objectives

1. To foster the traditional character of New Hampshire downtowns, villages, and neighborhoods by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life.

2. To incorporate a mix of uses to provide a variety of housing, employment, shopping, services, and social opportunities for all members of the community.

3. To provide choices and safety in transportation to create a livable, walkable community that increase accessibility for people of all ages, whether on foot, bicycle, or in motor vehicles.

4. To preserve New Boston's working landscape by sustaining farm and forest land and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts.

5. To protect environmental quality by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of New Boston by promoting low impact development and Best Management Practices.

6. To involve the community in planning and implementation to ensure that development retains and enhances the sense of place, traditions, goals, and values of New Boston.

7. To manage growth locally in the New Hampshire tradition, but work with neighboring towns to achieve common goals and address common problems more effectively.

Transportation Goal

To provide an adequate, scenic, and well-maintained road system that will facilitate the safe movement of pedestrians and both motorized and non-motorized vehicular traffic, and that will ensure access to existing land use as well as support the implementation of the future land use plan.

Transportation Objectives

1. To facilitate the flow of traffic on existing Town roads by minimizing and controlling the number and location of future points of access (curb cuts) to said roadways.

2. To encourage and facilitate safe pedestrian movement throughout the Town.

3. To promote compatibility between future growth and development, and the roads providing access thereto, by encouraging the development of those sites which are supported by adequate and well-maintained roads and to create a hierarchy of town roads to assist in said effort.

4. To maintain and support the program and schedule of repairs, maintenance and improvements for the Town's roads and bridges which includes adequate funding for personnel, materials, and equipment.

5. To complete, update and maintain the Town's inventory, condition survey and cost analysis for all roads, through the *Road Surface Management System (RSMS)*, or other appropriate methods.

6. To maintain and enhance the scenic and rural character of the Town by preserving existing stonewalls along roads and perpetuating gravel surfaced roads, where appropriate.

7. To seek third-party assistance in developing a Town transportation plan that recognizes financial resources and addresses congestion, safety, village character, pedestrian, bicycle, and handicapped access.

8. To develop a Corridor Management Plan and work with State DOT and Southern New Hampshire Planning Commission to alleviate traffic congestion in the village.

Livable, Walkable Community Goal

To make New Boston a place where people of all ages and physical abilities can easily and safely enjoy walking and bicycling as forms of transportation and recreation.

Livable, Walkable Community Objectives

1. To maintain and enhance the placement of and signage for crosswalks.

2. To employ traffic calming measures including education, enforcement and engineering.

3. To increase the availability of well connected, constructed and maintained sidewalks to include winter plowing.

4. To adopt and enforce motor vehicle noise performance standards.

5. To incorporate bicycling and walking facilities into all transportation projects as required by the American Association of State and Highway Transportation Officials (AASHTO) and the Americans with Disabilities Act (ADA) standards.

6. To provide easy, safe and accessible walking and bicycling to all key destinations throughout the Town.

7. To investigate and create innovative alternative parking options.

8. To improve nighttime lighting for easy and safe walking and bicycling while limiting or prohibiting light pollution as prescribed by the International Dark-Sky Association.[2]

9. To explore alternative routes across Town without accessing the town center.

10. To develop a contiguous walking, bicycling and recreational trail system throughout the Town.

Community Facilities Goal

To provide adequate, appropriate community facilities and services in the most cost-effective, efficient manner to maintain and improve the quality of life for residents and visitors to New Boston.

Community Facilities Objectives

1. To recognize the contribution and encourage the expansion of participation and volunteerism by individuals and local service organizations in the donation of services and materials to the Town's facilities.

2. To continue to cost-effectively purchase, operate and maintain Town services and facilities.

3. To provide educational and training opportunities to Town employees and those who volunteer essential services, so that they may more effectively discharge their responsibilities.

4. To prepare and maintain a complete inventory of municipally owned and acquired properties (land and buildings) and to maintain the use of those properties as community resources.

5. To continue to utilize the capital improvements program as an efficient means of prioritizing the Town's expenditures for community facilities, and maximize the communication among those preparing the program and the participation of the community in the preparation process.

Objectives Related to Specific Community Facilities and Services

1. Recreation Objectives:

[2] Visit http://www.darksky.org/ordsregs/odl-regs.html for more information.

a. To maintain, enhance and increase recreational opportunities and facilities for New Boston citizens of all ages and abilities and make more information available concerning same.

b. To improve the identification of and information available concerning publicly available trail systems.

c. To secure adequate and appropriate property to accommodate needed recreational facilities including offices, additional athletic fields, and a recreation/community center.

2. *Solid Waste Objectives:*

a. To continue the Town's recycling efforts.

b. To keep recyclable fee items reasonable – i.e. at cost.

c. To find the best markets for the Town's recyclables.

d. To provide efficient, cost effective means of Municipal Solid Waste disposal.

e. To keep operating costs down by having properly trained staff and continual public education.

f. To revisit all Standing Operating Procedures to ensure an effective cost/benefit ratio.

3. *Public Safety Objectives:*

a. To develop a plan for providing adequate fire fighting water supply systems for the entire Town.

b. To evaluate the adequacy of all departments involved in emergency response.

c. To maintain an inventory of all Town bridges and the appropriate maintenance or replacement alternatives as consistent with the biennial bridge inspections.

d. To develop a disaster preparedness plan and routinely test its effectiveness.

4. *Library Services Objective:*

a. To foster the library's role in promoting community interaction by maintaining and enhancing the library as a valuable resource providing opportunities at many levels for all ages.

b. To provide facilities, materials, equipment and staff to support and ensure quality library services in a cost effective manner for the Town's entire population.

5. *Education Objectives:*

a. To provide facilities, materials, equipment and staff to support and ensure a quality education in a cost effective manner for the Town's entire student population.

b. To improve and expand opportunities for continuing and adult education.

c. To evaluate the renewal of the Area Agreement.

d. To study the feasibility of the establishment of a middle school and/or a high school in New Boston.

e. To emphasize and maximize safety in all facets of the school day activities of students.

6. *Cemetery Objectives:*

a. To provide sufficient land area in an appropriate location to accommodate future needs for burial plots.

b. To continue to cost-effectively maintain the cemetery.

Conservation and Natural Resources Goal

To preserve, protect, and enhance the Town's scenic, recreational, open space and natural resources, as well as its environmentally sensitive areas, and where appropriate, to encourage the enjoyment thereof.

Conservation and Natural Resource Objectives:

1. To continue to develop and improve ordinances and regulations that protects New Boston's environmentally sensitive areas. These areas include, but are not limited to; steep slopes, wetlands, woodlands, floodplains, wildlife habitats and corridors, watersheds, drumlins, wetland buffers, and aquifer recharge areas.

2. To determine development densities based on maintaining open space, rural character, future water needs, soil capability, Smart Growth Principles[3] and other environmental criteria.

[3] Smart Growth Principles. See RSA 9-B Smart Growth and the Future Land Use Chapter of this plan.

3. To create regulations to promote environmentally responsible construction practices including habitat-sensitive site design, low impact development[4], landscape design criteria, prevention of soil erosion and stormwater treatment.

4. To encourage preservation of existing farmland and prime agricultural soils using environmentally responsible agricultural practices.

5. To promote the awareness of public open spaces and natural resources including the awareness and preservation of existing Class A or B recreational trails established under RSA 231-A.

6. To regulate development along scenic roads in order to preserve the natural and scenic character, including stonewalls and a forest buffer, and investigate participation in the Scenic Byways Program.

7. To implement an anti-litter ordinance to protect the Town's highways.

8. To create regulations to promote proper use of lighting to use less energy and to limit light pollution.

9. To implement a noise control ordinance to strengthen state control of vehicle and other noise.

10. To act in accordance with the recommendations of the Piscataquog River Management Plan which was prepared by the Piscataguog River Local Advisory Committee and adopted by the New Boston Planning Board in June 2000.

11. To identify and preserve aquifers of such quality and quantity that may provide the Town with future water supply sources.

12. To identify, preserve, maintain and protect large areas of land, which have been identified as having unique functions and values contributing to the economy and environmental well being of the community. Use of the information that has been developed under the Regional Environmental Planning Program may assist in this effort.

13. To update the New Boston Water Resources Management Plan[5] and the Town's Groundwater Conservation District zoning ordinance utilizing new maps and data.

[4] Low Impact Development is a process of developing land to mimic the natural hydrologic regime. It incorporates land planning and design practices and technologies to achieve this objective.

[5] New Boston Water Resource Management Plan, prepared by Southern New Hampshire Planning Commission for New Boston Planning Board, January 13, 1989.

14. To implement a shoreland protection regulation for the Middle Branch and remaining South Branch of the Piscataquog River and implement a riparian buffer study to protect undisturbed stream and river shorelines within New Boston.

15. To utilize New Hampshire Fish & Game Wildlife Habitat Maps to delineate and map significant wildlife corridors.

16. To conduct a Prime Wetlands study in accordance with RSA 482-A:15 as revised and the Administrative Rules of the New Hampshire Department of Environmental Services (see Wt 700 Prime Wetlands laws), and implement the recommendations.

17. To conduct and implement a Natural Resources Inventory (NRI)[6] of New Boston's natural resources.

Historical and Cultural Preservation Goal

To preserve, protect, and enhance the Town's unique historical buildings, sites, features and cultural heritage.

Preservation Objectives:

1. To consider the formation of an historic district commission or heritage commission to consider the criteria and process for identifying historical and cultural resources.

2. To continue to update an inventory of historic resources and development of a historic preservation ordinance.

3. To consider the establishment of an historic district.

4. To promote awareness of the significance and value of historical and cultural resources and the protection of the same.

5. To install marker signs identifying historical resources.

Earth Products Usage Goal

To identify sand and gravel deposits within the Town and allow for the utilization of said deposits while providing for public safety, the protection of natural resources, the maintenance of aesthetic and visual resources, and the conservation of property values.

[6] For information about what an NRI is and what should be included in an inventory see *Natural Resources Inventories, A Guide for New Hampshire Communities and Conservation Groups,* Revised and Updated by UNH Cooperative Extension, 2001.

Earth Products Usage Objectives:

1. To identify locations and volume of sand and gravel deposits within the community.

2. To determine the status of existing excavations with respect to statutory requirements.

3. To determine a timeline for reclamation of existing and new gravel operations.

4. To determine where future excavations will be allowed to occur, recognizing the location of deposits, the access available to such sites, the character of surrounding land uses, and the proximity to water resources and environmentally sensitive areas.

5. To create a town code enforcement officer whose duties would include the evaluation, regulation and enforcement of permitting use and reclamation of gravel operations.

6. To continue to regulate excavations in accordance with the Town's current ordinances and regulations and to continue to update and amend said ordinances and regulations as needed.

7. To include in the permitting process consideration of visual impacts on view sheds by earth products usage.

Forest Resource Goal

To sustain the forest resources for the many economic, physical wellness, and emotional well-being benefits they provide to the Townspeople and future residents.

Forest Resource Objectives

1. To encourage the maintenance of large contiguous parcels of forest lands in public and private ownership.

2. To build coalitions between forest landowners and people/groups who desire to use forestland for recreation.

3. To ensure that local land use decision making authority is based upon adequate natural resource information.

4. To improve landowner understanding of the range of forest management choices and the economic and ecological implications of those decisions.

5. To continue the practice of engaging professional assistance in administering the Timber Tax program.

6. To educate our community about the value of forests and forestry.

7. To continue to manage public lands in accordance with approved management plans based upon adequate natural resource inventories and with accepted best management practices and to promote similar planning for private landowners.

1 POPULATION

1.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left at various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to growth in New Boston. Additional responses related to growth can be found in the Existing Land Use Chapter:

How long have you lived in Town?

Less than 1 year	14
1 to 5 years	112
6 to 10 years	95
11 to 15 years	66
More than 16 years	185
No response	31

A quantitative and qualitative understanding of population characteristics and trends is vital to effective planning and management in any community. The total population of a community, as well as the unique characteristics of particular segments of the population, and the rate of growth, can have significant implications relative to the need for housing, the need for developable land, and the provision of municipal services.

By examining recent trends in population change in New Boston, reasonable projections can be made as to what might likely be expected in the future. In turn, municipal officials can use the information to plan for the efficient and timely provision of local government facilities and services, roads, employment opportunities, and natural resource use. This chapter examines the past trends of selected characteristics of New Boston's population, and provides projections for future population growth.

It is important to note that throughout this chapter and the rest of the Master Plan, most statistics are based upon population figures from the 2000 Census, which is the most comprehensive and accurate data source available at the time of publication. Figures since 2000 are estimates, although the margin of error is considered small. Table 1.1 shows the population growth since 2000, and the reader should keep this figure in mind while reading the document.

Table 1.1
Historic Population Growth, New Boston, 1960-2004

Year	Population	Absolute Change	Percent Change	Average Annual Change (%)
2004*	4,856	140	3.0%	3.0%
2003*	4,716	162	3.6%	3.6%
2002*	4,554	159	3.6%	3.6%
2001*	4,395	257	6.2%	6.2%
2000	4,138	924	28.7%	2.9%
1990	3,214	1,286	66.7%	6.7%
1980	1,928	538	38.7%	3.9%
1970	1,390	465	50.3%	5.0%
1960	925	N/A	N/A	N/A

Source: US Census, *NH OEP Population estimates

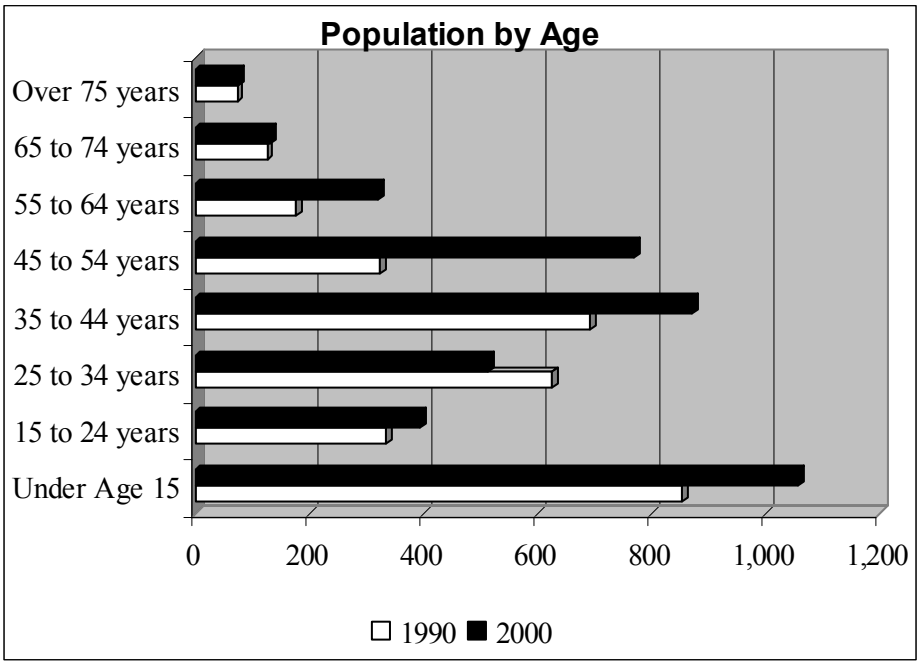
1.2 Historical Trends

New Boston grew from a population of 925 persons in 1960 to 1,390 persons in 1970, an increase of approximately 50 percent during that 10-year period. From 1970 to 1980, the population grew by 538 persons, an increase of nearly 40 percent over that 10-year period. During the period of 1980 to 1990, the Town's population grew by 1,286 persons, an increase of approximately 67 percent. From 1990 to 2000, the growth rate stabilized, with an increase of 924 persons, or 28.7 percent. The past four years, from 2000 to 2004, New Boston's has witnessed a 17.4 percent growth rate.

1.3 Characteristics of the Population

A look at the characteristics and the composition of a community's population can often shed some light on the needs of particular sectors of the population such as the school-age children, elderly, and single-parent households. Figure 1.1 shows the age distribution of New Boston's residents in both 1990 and 2000. Table 1.2 compares the same information for 1990 and 2000 in tabular form.

Figure 1.1



Source: US Census 1990, SF-1, P011 and US Census 2000, SF-1, P12

Table 1.2
Age and Sex Composition
New Boston, 1990 - 2000

	1990	Percent of Total	2000	Percent of Total
Total population: Male	1,596	49.7%	2,071	50.0%
Total population: Female	1,618	50.3%	2,067	50.0%
Under Age 15	854	26.6%	1,059	25.6%
15 to 24 years	336	10.5%	394	9.5%
25 to 34 years	627	19.5%	513	12.4%
35 to 44 years	694	21.6%	873	21.1%
45 to 54 years	325	10.1%	770	18.6%
55 to 64 years	178	5.5%	321	7.8%
65 to 74 years	126	3.9%	132	3.2%
Over 75 years	74	2.3%	76	1.8%

Source: US Census 1990, SF-1, P011 and US Census 2000, SF-1, P12

Table 1.3
Comparison of Population Change, 1990 - 2000

Municipality	1990	2000	1990-2000		
			Absolute Change	Percent Change	Average Annual Percent Change
New Boston	3,214	4,138	924	28.70%	2.90%
Amherst	9,068	10,769	1,701	18.80%	1.90%
Bedford	12,563	18,274	5,711	45.50%	4.50%
Francestown	1,217	1,480	263	21.60%	2.20%
Goffstown	14,621	16,929	2,308	15.80%	1.60%
Lyndeborough	1,294	1,585	291	22.50%	2.20%
Mont Vernon	1,812	2,034	222	12.30%	1.20%
Weare	6,193	7,776	1,583	25.60%	2.60%
Area Totals	49,982	58,847	8,865	17.70%	1.80%
Hillsborough County	335,838	380,841	59,230	17.60%	1.80%

Source: U.S. Census 1990, SF-1, P001 and US Census 2000, SF-1, P1

As shown in Table 1.3 above, New Boston's average annual population growth rate of 2.90 percent between 1990 and 2000 is second highest among neighboring municipalities. In terms of relatively recent mobility, the 2000 Census reports that approximately 41 percent of the residents five years of age and older, who did not live in their New Boston house in 1995 (1,568 persons) came from elsewhere in Hillsborough County; 353 came from other states, primarily in the northeast; and 95 new residents came from other New Hampshire communities.

Table 1.4
Households in New Boston, 1990 - 2000

	1990	**2000**	**Percent Change**
Total Households	1053	1441	36.85%
Persons Per Household	3.05	2.88	-5.57%
Family Households	866	1181	36.37%
Married Couple Households	763	1018	33.42%
Single-Parent Family Households	103	92	-10.68%
Non-Family Households	187	260	39.04%

Source: US Census 1990, SF-3, P-004, 005, 024 and US Census 2000, SF-3, P01, 10, 13

The majority of New Boston's 1,441 households are family households (82 percent), with a great number of traditional married-couple families (71 percent of all 2000 households). The average number of people per household has decreased from just over three in 1990 to 2.88 in 2000. The number of single-parent households has decreased slightly despite population increases. In 2000, there were 92 single-parent households, compared to 103 single-parent households in 1990. Despite decreases in the number of single-parent

households, the number of non-family households has increased nearly 40 percent since 1990. Non-family households are composed of unrelated individuals and thus could indicate couples delaying marriage, same-sex couples or householders bringing in roommates to meet the high costs of homeownership.

Census data for 2000, reported in Table 1.5, shows that approximately 94 percent of the New Boston residents who, at the time, were 25 years of age and older, had attained a high school degree, and 36 percent had achieved Bachelor's Degrees or higher. Both of these figures are up slightly from 1990.

Table 1.5
Educational Attainment - 1990 - 2000
(Persons 25 years of age and over)

	1990		2000	
	Number	Percent	Number	Percent
High School Degree	1725	86.0%	2520	93.90%
Bachelor's Degree	572	28.5%	967	36%

Source: US Census 1990, SF-3, P057 and US Census 2000, SF-3, P148A

In 2000, a shown in Table 1.6 on the following page, the majority of the 2,318 employed residents 16 years of age in New Boston were employed in managerial and professional specialty occupations. Table 1.7 provides information on the class of workers 16 years of age and older in the New Boston's workforce. As shown by this data, private for profit wage and salary workers represent the largest class of workers in New Boston.

Table 1.6
Occupation of Employed Persons - 2000
(Workers 16 years of age and over)

Occupation	Number
Total	2,318
Managerial and Professional Specialty Occupations:	994
Executive, Administrative and Managerial	390
Professional Specialty Occupations	604
Technical, Sales, and Administrative Support:	526
Sales and Related Occupations	180
Administrative Support Occupations, including Clerical	346
Service Occupations:	248
Healthcare Support Occupations	35
Protective Service Occupations	18
Service, except Protective and Household	195
Farming, Forestry, and Fishing Occupations	6
Construction, Extraction, and Maintenance Occupations	257
Production, Transportation, and Material Moving Occupations	287
Production Occupations	164
Transportation and Material Moving Occupations	123

Source: U.S. Census 2000, SF-3, P50

Table 1.7
Class of Worker - 2000
(Workers 16 years of age and over)

Class	Number
Private for Profit Wage and Salary Workers	1,662
Private Not-for-Profit Wage and Salary Workers	115
Local Government Workers	178
State Government Workers	57
Federal Government Workers	70
Self-Employed Workers	225
Unpaid Family Workers	11

Source: U.S. Census 2000, SF-3, P51

1.4 Population Projections

The population of a community can fluctuate with changes in national and regional economic conditions. Population is also affected by employment opportunities, the quality of transportation networks, and relevant advantages over neighboring communities. Population projections are statistics developed to help a community picture

its likely future. Because assumptions used in developing the data and the growth factors can change, projections should not be taken to be hard-and-fast data. They are meant to provide general direction as to what is likely to be expected based on the stated assumptions.

It is important for New Boston to be able to anticipate the likely housing demand of future populations in order to appropriately plan for residential growth, and to evaluate the capacity of schools, roads, fire and police services and other municipal services and facilities to meet anticipated demands. Once future needs are predicted, detailed studies can be done to determine specific project design, capacity, and timing requirements.

There are various methods, which can be used to produce total population projections. The Southern New Hampshire Planning Commission (SNHPC) and the New Hampshire Office of Energy and Planning (OEP) have prepared population projections for the Town of New Boston through the year 2025 (see Table 1.8). The SNHPC figures project an increase of 2,537 people between the years 2000 and 2025 (an increase of approximately 61 percent), while the State projects a somewhat smaller increase of 2,023 people (an increase of approximately 49 percent).

Table 1.8
Population Projections for New Boston
2000 - 2025

Year	NH OEP	SNHPC
2000*	4,138	4,138
2005	4,840	4,816
2010	5,200	5,352
2015	5,550	5,834
2020	5,860	6,272
2025	6,170	6,675

Source: US Census 2000, SF-1, P01*, NH OEP and SNHPC

The SNHPC methodology includes more localized data and assumptions about New Boston and its surrounding area than does the OEP Procedure. The Commission makes its projections based on natural growth and net migration. OEP uses more of a "top-down" approach. That is, after projecting a total for the state, that figure is divided among the individual counties, and then the respective county totals are further divided among the county's municipalities. The Commission feels that this procedure is not sensitive to the differences in local situations and, for this reason, the Commission believes that its figures should be considered to be a bit more accurate than the state's.

2 EXISTING LAND USE

2.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left at various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to existing land use in New Boston as well as the overall growth and development of the town.

Please rate the following:

	Most Important	2	3	Least Important	No Response
Sense of privacy	**311**	125	41	16	11
Shopping facilities in town	27	75	179	**209**	13
Office space in town	40	56	146	**245**	16
Maintaining traditional village district	**285**	153	42	15	8
Land Development Regulations	**284**	120	51	26	22

Tell us what you think about the current growth rate in New Boston.

Too Slow	About Right	Too Fast	Excessive	No Response
8	113	**207**	159	17

Do you feel the impact of growth in New Boston, and are you comfortable with it?

Don't Feel	Comfortable	Uncomfortable	Very Uncomfortable	No Response
47	76	**190**	182	8

Do you feel it's important to have a growth management ordinance in New Boston?

Yes	No	No Response	Maybe
432	60	9	2

Should the existing single-family house lot of 200' frontage and 2 acres be?

Increased	Decreased	Remain the Same	No Response
159	33	**287**	24

If you feel lot size and frontage should be changed, the changes should be made because of (check all that apply)?

Reason	Number of Responses
Soil conditions/septic feasibility	110
Future water needs of the town	114
Too rapid increases in required town services	162
Need to balance budget against tax rate	126
Loss of open space	**197**
Too rapid increase in school enrollment	149
Existing character/flavor of the town	**196**
Increase burden on emergency services	114
Other	20

Should the back lot ordinance be discontinued? (It allows reduced, 50' frontage in order to develop a 5 acre lot behind the front lots)

Yes	No	No Response	Not Sure
116	**318**	66	20

The results of the survey indicate a strong land use concern among residents about protecting privacy and maintaining New Boston's traditional village charm. The importance of having shopping facilities and office space in town is not rated highly. But, at the same time, most residents feel New Boston is growing too fast and they are uncomfortable with the impacts of growth on the town. Overwhelming, the vast majority of respondents believe New Boston needs a growth management ordinance. Many residents also feel that the town's existing single-family house lot size should remain 2 acres with a minimum of 200 feet of road frontage. If this lot size requirement were to change, the responses illustrate that the primary reason should be due to the loss of open space or loss of the existing flavor and character of the town or for too rapid increase in town services and not for other reasons.

Lastly, an overwhelming number of respondents feel the town's existing back lot ordinance should remain in place and not be discontinued. Additional community survey results that relate to where various types of land use should be encouraged in the town can be found in the Future Land Use chapter.

2.2 Goals and Objectives

Land Use Goal

To guide and promote a pattern and arrangement of commercial, industrial, residential, and agricultural land use consistent with the physical, social, economic, aesthetic, and environmental needs and desires of the citizens of New Boston, and with the requirements of relevant State and Federal laws and regulations.

Land Use Objectives

1. To continue to refine the Town's Personal Wireless Service Facilities Ordinance to keep pace with technological change.

2. To continue to refine the Town's open space/cluster development regulations and other innovative land use techniques.

3. To encourage, develop and maintain wildlife corridors.

4. To investigate means of protecting land on both sides of River Road and along the Piscataquog River and its branches.

5. To create and adopt a growth management ordinance.

6. To create and adopt an open space ordinance including a requirement for open space in all major subdivisions.

7. To encourage preservation and maintenance of fields, forests, wetlands, mountain tops, hillsides, river views, river front, river beds, and stone walls through such strategies as transfer of development rights and density credits.

8. To continue to refine and enhance the existing sand and gravel regulations balancing environmental and commercial concerns.

9. To conduct a Cost of Community Services Study.

10. To consider implementing new zoning districts based on performance zoning.

11. To investigate the creation of additional village districts.

12. To investigate and implement where appropriate a transfer of development rights program and the use of density credits.

2.3 Introduction

Different land use activities are strong determinants of a sense of community, neighborhood cohesiveness, safety and health -- all of which matter to long-term New Boston residents as well as newcomers to town. The type and intensity of land use activities impact the physical quality of the environment -- scenic views may be lost through the construction of new buildings or the environment may be degraded as a result

of harmful development practices. Unplanned development offers little certainty to current property owners about future neighboring land uses that may affect their property values or quality of life and can often result in the inefficient provision of municipal services such as police and fire protection, educational facilities development, school bus transportation, and roadway maintenance.

This chapter of the Master Plan describes the existing land use and zoning patterns in New Boston and reviews the development patterns which have occurred over the past decade. It is designed to assist Town officials and residents in determining present land use needs and identifying and planning future trends and potential impacts and conflicts.

2.4 New Boston's Overall Growth and Development

From an historical perspective, New Boston's overall growth and development trend has been to subdivide and build adjacent to existing roads. This trend has continued from New Boston's historic past through much of the 1990s. In more recent years, however, the trend has been changing toward the subdivision of vacant interior backlands with access being provided by the construction of new roadways such as Whipplewill Road, Lincoln Drive, Foxberry Drive, Arrowwood Road, Styles Road, Summit Drive, Byam Road, Popple Road, Swanson Road, Labree Road, Orchard Road, Pearson Lane, Indian Falls Road, Carriage Road and Hemlock Drive.

New Boston's land use today can be described as follows:

1. Scattered rural residential development consisting of single-family detached homes on individual lots and in new subdivisions and cluster residential developments.
2. No real expansion of existing commercial areas in the village center or along the town's major transportation corridors.
3. No new industrial development, except expanding sand and gravel operations.
4. Significant acreage in large lot rural residential and agricultural zoning.
5. A small but significant central village center.
6. Large land holding owned by US Government used as satellite tracking station.
7. Town Forests and protected lands along the Piscataquog River.
8. Significant forestry and decreasing agriculture use.

The scattering of new residential dwellings and subdivisions throughout the rural areas of the community is a major land use trend facing New Boston. In addition, there has been renewed interest in cluster residential development. While New Boston has not experienced a rapid pace of development, there has been continued steady growth within the community over the past few years. Town building permit records for 2003, 2004 and 2005 indicate a total of 56, 54 and 52 new single family homes, 4 duplex, 2 mobile homes and 4 commercial buildings have been issued.

Another important land use trend is that there has been limited commercial and almost no industrial growth in New Boston. Only four new commercial buildings have been built

in New Boston between 2003 and 2005 and no new industrial uses have been planned or considered. While there has been an acceptance of certain small business and retail uses (see Economic Development chapter), the demand, as well as community acceptance for additional commercial and industrial growth has been spotty over the years. This trend is likely to continue in the near future until New Boston considers a variety of alternative smart growth and development options. These development options and smart growth alternatives are described in the Future Land Use chapter.

2.5 Land Use Inventory

In the spring of 2004, the Southern New Hampshire Planning Commission (SNHPC) prepared a Build-Out Analysis of the Town of New Boston to paint a picture of the future growth and development of the community under the town's existing development regulations. The results of the Build-Out Analysis are discussed in the Future Land Use Chapter. A full summary of the analysis can be found in Appendix H. As part of this analysis, an inventory of New Boston's current land use was conducted.

This land use inventory began by first updating the 2002 digital composite tax maps on file with the SNHPC. New lots, lot line adjustments and roads were added to the maps, as necessary. Once the composite tax maps were updated with this new information, the maps were merged using GIS by tax map number with the Town of New Boston's 2003 tax assessor database. Using this merged GIS database, a first cut land use map was generated based upon the assessor's land use codes in the database. Lots and parcels with building values were assumed to be developed and lots without building values were assumed to be vacant.

The second step in the land use inventory was to determine the real amount of vacant undeveloped land in New Boston. It was determined that instead of showing all existing residential lots greater than 5 acres in size as developed that the undeveloped portions of these lots could be shown as open and vacant land. This was accomplished by dividing the lots into two parts – the developed portion of the lot containing the primary dwelling, which was shown as three acres in size and the undeveloped portion representing the balance of the lot, which was shown as vacant. Three acres was selected as an average overall lot size, although the Town's zoning ordinance permits a front lot of 2 acres. To assist in this process, 1998 USGS Orthophoto Quads were used to verify the existing residential use of each parcel. The acreage of lots and parcels coded by the assessor's database as commercial and industrial use as well as public/semi-public ownership were not divided in this fashion and were shown according to the assessor's land use code. Because this land use inventory is based upon the assessor's land use classifications some industrial land may be coded commercial and vice versa. Multi-family was not listed in the Town's assessor's database and therefore was not shown.

The completed Existing Land Use Map utilizes the following ten land use categories: Commercial, Industrial, Public/Semi-Public, Single-Family, Two-Family, Manufactured Housing, Town Forest, Sand and Gravel, Vacant, Water and Roads. The Existing Land Use Map (Map 1) is shown on the following page.

Insert Map 1 Existing Land Use here

2.6 Land Use Categories

One of the important steps in any land use analysis is to determine how to classify the various buildings, uses and land areas that exist within a community. In general, land is classified according to the physical characteristics and the present use that is occupying the property. Land can also be classified for tax valuation purposes. Typically, there are variations in land use categories based upon the unique characteristics of the land and how a community grows and develops.

The following is a listing and description of the land use categories found in New Boston and used on the Existing Land Use Map based upon the town's tax assessor's records.

- Commercial: Uses that supply goods and/or services to the public as a principal use of the property. These range from grocery stores, gas stations and retail sales of products to professional businesses, banks and medical offices.

- Industrial: Land and structures used for manufacturing, processing, packaging, storage and/or warehousing.

- Public/Semi-Public: Establishments and facilities supported by and/or used exclusively by the public or non-profit organizations. These include fraternal, religious, charitable, educational, governmental uses and buildings, recreation and public utilities, including the land owned and operated by the US Government as a Satellite Tracking Station.

- Single and Two-Family: Land and buildings where residential dwelling units are found. These include standard (site built) single-family homes and duplexes, factory-built modular homes, and seasonal cottages.

- Manufactured Housing: Mobile homes (now classified as manufactured housing) and trailers.

- Town Forest: Forested lands held in public ownership by the Town of New Boston.

- Sand and Gravel: Privately owned active and inactive sand and gravel operations.

- Vacant: All open and undeveloped lands in New Boston, including portions of existing residential lots greater than 5 acres in size which contain open and undeveloped areas. This category also includes agricultural and forestlands held in private ownership as well as conservation lands held in trust or conservation easements.

- Water: All surface waters, including streams, rivers, ponds and lakes both natural and impoundments.

- Roads: All existing streets and roads, both public and privately owned.

2.7 Existing Land Use Analysis

The following analysis examines the various land use categories on the Existing Land Use Map and compares the amount of acreage shown on the map with previous land use studies prepared for New Boston. Specifically, it compares the land use documented in this plan with the Town's 1987 Master Plan.

Table 2.1 provides a breakdown of the Town of New Boston's 2003 existing land use. As illustrated by this table, there are approximately 18,691 acres of vacant undeveloped land within New Boston. This represents 67 percent of the total land area of the town. While this amount of land appears to be staggering in size, the actual amount of developable acreage representing opportunities for future development is less. This is due to New Boston's soils, topography and a variety of natural constraints, which are addressed as part of the Build Out Analysis in the Future Land Use chapter.

Table 2.1
Existing Land Use, New Boston, 2003

Land Use Category	Acres	Percent of Total Land
Commercial	70	0.3%
Industrial	59	0.2%
Public/Semi-Public	1,696	6.0%
Single and Two Family Residential	4,033	15.0%
Manufactured Housing	44	0.2%
Town Forest	494	1.5%
Sand and Gravel	1,425	5.0%
Vacant	18,691	67.0%
Water	423	2.0%
Roads	713	3.0%
Total	27,648	100%
Total Developed Land*	6,615	24%

*Includes Commercial, Industrial, Public/Semi-Public, Single and Two-Family Residential, Manufactured Housing and Roads.
Source: New Boston 2003 Tax Assessor's Records & SNHPC

The most predominant land use activity in New Boston is residential development, which is found on roughly 4,033 acres or 15.0 percent of the town. This land is characterized by single-family detached dwellings and two-family structures widely dispersed along New Boston's various state and town roadways, and in the residential subdivisions which have penetrated the back lands off these roads. There are also numerous mobile homes and trailers scattered throughout the town on individual parcels of land as well as mixed-use units or home businesses (single family with a non-residential use). Multi-family dwellings consisting of three or more units within one building are not as common and are not documented as part of this land use inventory. This is because the town's tax assessor's records did not distinguish or provide a separate land use code for this use.

Public/Semi-Public is the next largest land use category consisting of 1,696 acres or 6.0 percent of New Boston. This amount of acreage is somewhat deceiving however as the US Government Satellite Tracking Station consists of 1,563 acres or roughly 89 percent of this total. Roads followed by water features and Town Forest occupy the next largest land use categories, consisting of 713, 423 and 494 acres respectively or roughly 6.5 percent of the Town when combined.

It is important to note that the Town of New Boston first got involved with the establishment of Town Forests and a woodland management program when it acquired the Lydia Dodge Lot (244.7 acres) in July of 1928. Today New Boston's Town Forests consist of seven parcels comprising approximately 494 acres. Approximately 8 acres of the Lydia Dodge Lot is now used as the Town's Transfer Station and Recycling Center, the former Town Landfill and a municipal-owned sand and gravel pit, which is a staging area only since the gravel has been depleted. Overflow parking for the ballfield across the street also takes place here.

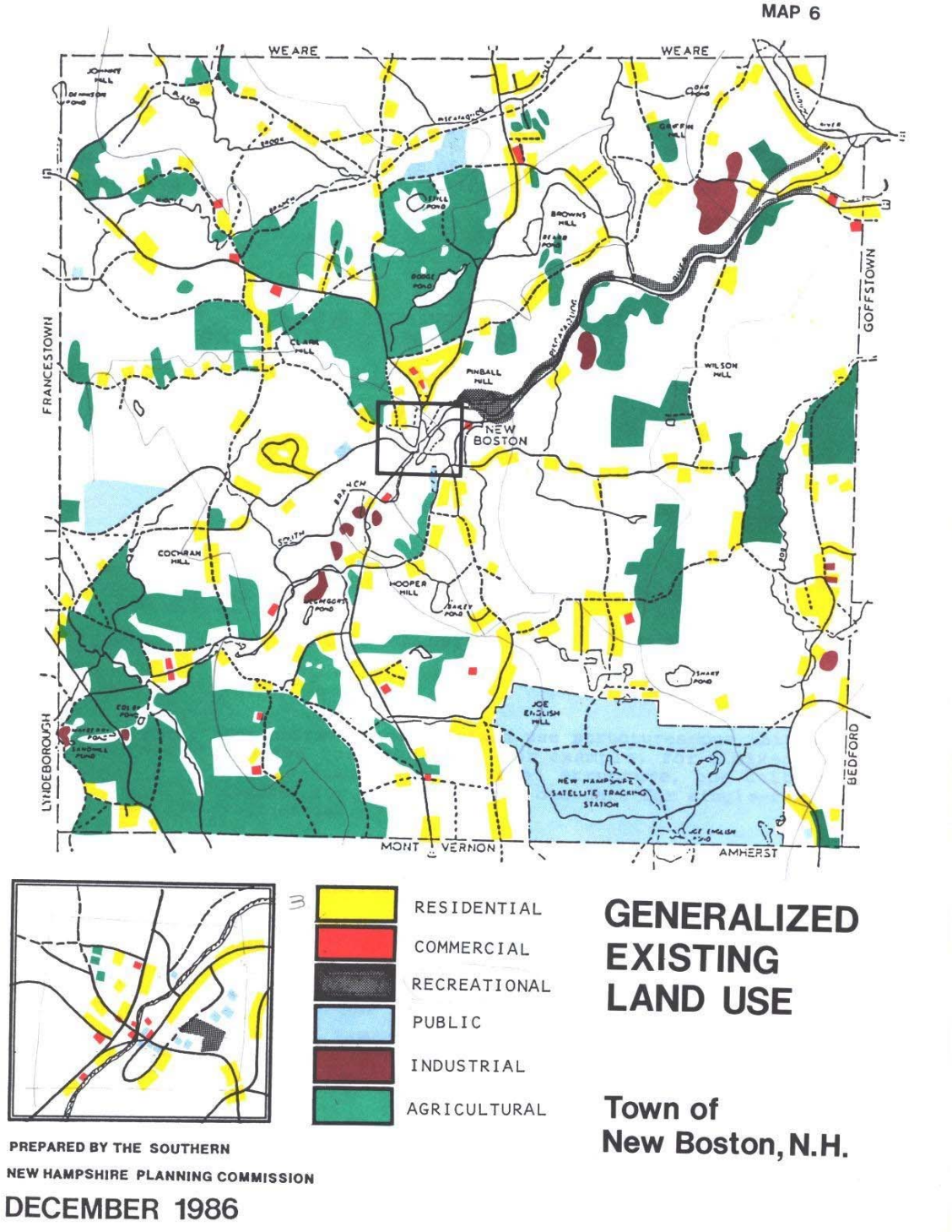
Commercial and Industrial developed land when added together occupy 129 acres or 0.5 percent of the total land area of New Boston. These land use activities are not always visible from adjacent roads, except for the existing businesses located within the Village and along NH 13, and scattered commercial land located along No Mast Road within the northeast corner of the town. Commercial activities have been identified on a total of twenty-one parcels consisting of 70 acres. An unknown number of additional commercial businesses are operated out of residential homes, scattered throughout the town.

One of the major commercial ventures in New Boston is the campground located on Cochran Hill Road, north of Old Coach Road. This facility contains roughly 126 acres of which approximately 75 acres are believed to be developed.

As indicated by the Town's Tax Assessor's Records, much of the industrial developed land located within New Boston can be found along Parker Road and on either side of NH 13 east and south of the village. Some of these industrial lands are located on or near existing sand and gravel sites. Sand and gravel operations occupy a significant portion of New Boston's total land area and as such, were made a separate land use category. There are currently a total of 25 sand and gravel lots in New Boston (an official Town list of all current active and inactive sand and gravel operations in New Boston is provided in Appendix A). This list provides an estimate of both the gross pit acreage on the lot as well as the acreage of the lot itself. The total pit acreage of all sand and gravel parcels as shown by this list is 176.38 acres. The total of all sand and gravel lots is 1,425 acres or 5.0 percent of the Town.

The remaining area of each parcel is considered to be "available" for expansion of the excavation activity, or for future development. In reality, following site restoration, excavation sites are frequently converted to other uses, as may be permitted by zoning for the district(s) in which they are located. In fact, the excavation site itself could become available at some point for future re-use and development.

Figure 2.1 – Generalized Existing Land Use Map - 1986



The least amount of land use acreage in New Boston is occupied by Manufactured Housing, which consists of only 44 acres or 0.2 percent of the Town. Table 2.2 provides a comparison between the 2003 land use data and the 1986 land use data collected for New Boston's 1987 Master Plan. While this comparison is helpful in illustrating overall changes in specific land use categories during this time period (such as commercial, industrial, public/semi-public and residential), there is no consistency in the total number of acres reported for the entire town. However, it is clear that the 2003 land use data more accurately reflects the total geographic area of New Boston, which is 43.2 square miles or 27,648 acres, while the 1986 data considerably overstates it. With this understanding in mind, however, some interesting trends can be observed. First, it is important to note that a total of 5,079 acres of agricultural land existed in New Boston in 1986. While the 2003 land use inventory did not take agricultural land into account, other sources of data available now indicate there are only 1,180 acres of farmland remaining in the town (NH Dept. of Revenue Administration, Summary Inventory of Valuation Form MS-1 for 2006). Second, it is important to note that there has been largely little change in commercial and industrial land in New Boston since 1986 (the reduction in amount of industrial land from 1986 to 2003 is due to how the land is assessed). During the same period of time, there has been a significant increase in the amount and percentage of residential land. This is reflective of New Boston's overall land use trend, which has predominantly favored residential growth and development.

Table 2.2
Comparison of Existing Land Use in Acres
New Boston, 1986 and 2003

Land Use Category	1986	Percent	2003	Percent
Commercial	73	0.03%	70	0.3%
Industrial	161	1%	59	0.2%
Public/Semi-Public	2,110	8%	1,696	6%
Residential	1,752	6%	4,033	15%
Manufactured Housing	N/A	N/A	44	0.2%
Town Forest	N/A	N/A	494	1.5%
Vacant	18,227	65%	18,691	67%
Water	N/A	N/A	423	2%
Roads	630	2 %	713	3%
Sand and Gravel	N/A	N/A	1,425	5%
Agricultural Land	5,079	18%	N/A	N/A
Total	28,032	100%	27,648	100%
Total Developed Land*	4,726	17%	6,615	24%

*Includes Commercial, Industrial, Public/Semi-Public, Residential, Manufactured Housing and Roads.
Source: New Boston 2003 Tax Assessor's Records & SNHPC 1986 Land Use

A copy of the 1986 Generalized Existing Land Use Map prepared by SNHPC for the Town's 1987 Master Plan is provided on the following page. In reviewing this map, it is important to note that there has not been much change between 1986 and 2003, except for

the growth and the expansion of residential land throughout the Town and the loss of agricultural lands since 1986.

2.8 Regional Land Use Data

In addition to the 2003 land use inventory prepared for this master plan, SNHPC has also collected land use data illustrating total residential, total non-residential, total developed area and total vacant area for every town within the region between 1995 and 2004. Table 2.3 below provides a land use comparison by acreage in New Boston from this data.

As indicated in this table, the total developed acreage of the town is estimated to be 7,386 acres, approximately 27 percent of New Boston's total land area. This estimate is high compared to the 2003 existing land use data collected for this plan, which found that the total developed acreage of the town is 6,615 acres or roughly 24 percent of the Town (see Table 2.1). In addition, the total number of vacant acres estimated to be 19,944 in Table 2.3 does not reflect the 18,691 acres reported in the 2003 existing land use data.

The residential and non-residential acreages reported in the table below also are not consistent compared to the 2003 existing land use data and therefore should not be relied upon. As a result, the acreage estimates presented in Table 2.3 below should be regarded as approximations and should be utilized for reference purposes only.

Table 2.3
Land Use Comparison by Acreage
New Boston, 1995 and 2004

	1995	2004	Absolute Change	Percent Change
Total Land Area	27,322.0	27,322.0	0.0%	0.0%
Residential Acreage	2,479.7	3,765.3	1,285.6%	51.8%
Non-Residential Acreage	3,318.5	3,620.7	302.2%	9.1%
Developed Acreage	5,798.2	7,386.0	1,587.8%	27.4%
Vacant Acreage	21,523.8	19,944.5	-1,579.3%	-7.3%

Source: SNHPC 2004 Land Use Report

2.9 Existing Zoning Analysis

Table 2.4 summarizes the Town's existing zoning district and acres. This information is important as a comparison can be made between the Town's existing land use and its current zoning districts. New Boston's Zoning Map (Map 2) is shown on the following page. There are also two additional maps, which are referenced in the Town's Zoning Ordinance. These maps are the Town of New Boston's Wetland Conservation District Map (Map 3) and the Groundwater District Map (Map 4), copies of which are included in this plan. The official maps are located at the Town Hall and in the Planning Office.

Insert Map 2 Zoning

Table 2.4
Existing Zoning
New Boston

Zoning Districts	Acres	Percent
Industrial	6	0.02%
Commercial	604	2%
Residential-One	131	0.5%
Manufactured Housing Park	130	0.5%
Residential-Agriculture	25,145	91%
Forestry and Conservation	1,637	6%
Total Town Acres	27,648	100%

Source: SNHPC & Town of New Boston (including 2006 Town Ballot Vote Results)

2.9.1 Industrial

The purpose of the Industrial District is to provide a location for the establishment of manufacturing plants to improve employment opportunities and broaden the tax base in the Town of New Boston. The Industrial District is designed to have good access to transportation facilities and not conflict with the uses of other areas. A variety of light manufacturing and offices are permitted within this district, provided these uses are in keeping with the goal of making New Boston an attractive town. The minimum lot size is 3 acres. The minimum setback requirements are 50 foot front and 40 foot side and rear, except where an industrial use abuts any residential district, the minimum rear yard must be 50 feet.

Currently, the Industrial District comprises only 6 acres, which is 0.02 percent of the Town of New Boston. There is currently only one industrial land use located within an industrial zone in New Boston, which is a cabinetmaker. This property is located along NH 13 at the southwest corner of the intersection with Byam Road. This means that there is currently no industrial zoned land available in New Boston for future industrial development, unless other properties in Town are rezoned. As a result, much of the existing industrial developed land in New Boston according to the Town's Assessor Records is currently non-conforming. This excludes sand and gravel excavations, which is permitted by special exception in all districts. In order for these properties to be used for future industrial use they must be rezoned.

2.9.2 Commercial

The purpose of the Commercial District is to provide areas for shopping facilities, offices, banking facilities and other commercial operations within New Boston. The Town's Zoning Ordinance requires that these areas provide access, parking, adequate lighting, good design, and similar related items for convenience and safety. The minimum lot size is 3 acres. The minimum setback requirements are 50 feet front yard, 20 foot side and 40 feet rear, except where a commercial use abuts any residential district, the minimum side yard is 40 feet and the minimum rear yard is 50 feet.

Currently, the Commercial District encompasses 604 acres or roughly 2 percent of the Town of New Boston. There are roughly 8 general areas within New Boston that are zoned for commercial development. Commercial zoning exists within the Village area and along NH 13 and Mont Vernon Road. There is also a commercial zone located along Mont Vernon Road near the Mont Vernon town line and along Chestnut Hill Road adjacent to the Bedford town line. The largest commercial zoning district can be found along Weare Road at the intersection with Dodge Road. This area is mostly undeveloped. There are also two large commercial districts located along NH 13 near Goffstown. In addition, there are a number of parcels of commercially zoned land located along North Mast Road between Weare and Goffstown.

The Existing Land Use Analysis indicates that there are roughly 70 acres of developed commercial land currently existing within the Town of New Boston. This leaves roughly 534 acres of commercial zoned land available for future development.

2.9.3 Residential-One

The purpose of the Residential-One district is to provide opportunities for mixed types of residential use, including single-family detached, two-family dwellings, multi-family, accessory buildings and uses, and agriculture. Other uses permitted include home businesses, manufactured home parks, family day-care, private schools, outdoor recreational facilities, public use, office, lodging homes, hospitals and funeral homes. The minimum lot size for single-family lots is 1.5 acres with 150 feet of road frontage and 50 foot front and 20 foot side and rear yards. The minimum lot size for two-family dwellings is 2.0 acres with 200 feet of road frontage with the same setbacks as single-family. Multi-family requires a minimum of 2.5 acres for the first three units, plus 0.5 acres for each additional dwelling unit up to a maximum of 12 units. Setbacks are 50 feet for front, side and rear. There is also a 150 foot building and wastewater setback required in this district for any multi-family development adjacent to a body of water or wetland as defined in the Wetlands Conservation District.

The Residential-One District includes 131 acres or roughly 0.5 percent of the Town. This zoning district is currently located in only two specific areas. On several lots located south of and between Clark Hill Road and Briar Hill Road west of the village and on the lot located off Pulpit, Bedford and Campbell Pond Roads. At the present time, very few of these lots are developed and thus are available for future higher density residential development, including multi-family.

2.9.4 Residential-Agriculture

The Residential-Agriculture District as defined by the Town's Zoning Ordinance is intended to provide for low density, rural living for permanent residents and an opportunity for seasonal residents to have a second home in the country. This zone is the largest zoning district in New Boston and it is dispersed throughout the entire town. Some of the factors limiting development in this district include remoteness from the town center, slopes exceeding 15 percent, poor town roads, which are often difficult to travel on during the spring, and large areas not suitable for on-site sewage disposal. Therefore, this district is designed to support the Town's overall goal of preserving the

rural character of New Boston. Only one principal building and principal use is permitted on a lot within this district. The types of uses permitted include, agriculture, forestry, one or two family dwellings, seasonal dwellings, accessory buildings or uses, cluster residential development, home business, family day-care or day care center, home shop, public use and boarding and/or riding stables.

The minimum lot size is 2 acres for a frontlot with 50 feet front and 20 feet side and rear yards. The minimum lot size is 5 acres for a backlot with 50 feet frontage and 20 feet side and rear yards. A backlot is defined as a lot using backland, thereby, being located behind a lot with road frontage, and having 50 feet of road frontage on a Class V or better road. Cluster residential development requires a minimum tract size of 15 acres and 25 percent of the development must be designated as common open space. There is a minimum lot size of 1 acre within a cluster residential development.

The Residential-Agricultural District includes 25,145 acres or 91 percent of Town. Based on the Existing Land Use analysis in this chapter, a total of 4,033 acres of existing residentially developed land has been identified in New Boston. Most, but not all of this residential land use occurs within the Residential-Agriculture District. It can be assumed that roughly 21,112 acres (25,145 less 4,033 acres) of Residential-Agriculture District zoned land exists in New Boston and could be available for residential development in the future. However, the reality is that only 8,502 acres of Residential-Agriculture zoned land could be available for future development due to a number of environmental and natural constraints such as steep slopes, wetlands and other water bodies. Refer to the build out analysis in the Future Land Use chapter and Appendix A for further details.

2.9.5 Manufactured Housing Park

According to the Town's Zoning Ordinance, the purpose of the Manufactured Housing Park district is to allow for the use of manufactured housing units under conditions intended to enhance affordable housing opportunities. Presently manufactured housing is permitted on any lot in New Boston. Besides the Manufactured Housing Park District, a Manufactured Housing Park is also allowed as a Special Exception within the Residential One District. Within the Manufactured Housing District, a manufactured housing park must have a minimum tract size of 15 acres and each manufactured housing space within the park must be at least 15,000 square feet in size. In addition, there is a 150 building and septic system setback requirement from any water body or wetland.

Currently, there is one Manufactured Housing Park district in New Boston consisting of 130 acres, which represents 0.5 percent of the Town. This district is currently undeveloped and is located on the south side of Twin Bridge Road south of the Weare town line. As part of the ballot vote in 2006, the Town's zoning was changed to permit single family dwellings to be constructed in the MHP district according to the single family requirements of the R-1 District. The Planning Board has had two informational discussions with an applicant regarding subdividing the land noted above into single-family lots per the R-1 requirements.

2.9.6 Forestry and Conservation District

As defined by the Town's Zoning Ordinance, the purpose of the Forestry and Conservation District is to protect large areas of undeveloped land for the purposes of:

- Land conservation and wildlife habitat;
- To preserve the rural character of the town;
- To maintain natural resources, including aquifers which provide water to private wells;
- To maintain recreational opportunities and scenic beauty;
- To encourage the continuation of large contiguous tracts of forest land in private ownership;
- To encourage forestry and timber harvesting;
- To develop linkages of open space corridors; or
- To protect large areas of undeveloped land which are undevelopable or marginally developable because of poor road access, steep slopes, shallow depth to bedrock, or severe limitations for septic systems.

Uses permitted in the Forestry and Conservation District include single-family dwellings, forestry, wildlife habitat and management, conservation and nature trails and outdoor recreational facilities. The minimum lot size in this district is 25 acres with 50 foot front and 75 foot side and rear yards. Currently, there is only one property zoned Forestry and Conservation in the Town of New Boston. This is the US Military Satellite Tracking Station located in the southeast corner of New Boston along the Amherst town line. This district is roughly 1,637 acres in size, which represents 6 percent of the Town.

There is always a possibility in the future that the US Military may relocate or terminate its satellite tracking facilities on this property. In the event that this ever happens, the Forestry and Conservation District zone protects the Town from future subdivision development by providing for large-lot zoning.

2.9.7 Wetlands Conservation District

The Wetlands Conservation District is intended to regulate the uses of land subject to standing water or extended periods of high water table. The boundaries of this district are defined as those areas of Town that contain marshes, ponds, bogs, lakes, streams and rivers, as well as soils that are defined as poorly or very poorly drained by the "Soil Survey of Hillsborough County New Hampshire, Eastern Part" (October 1981) conducted by the U.S. Department of Agriculture Soil Conservation Service. A map designated as the Town of New Boston Wetlands Conservation District Map was prepared and is referenced in the Town's Zoning Ordinance. However, according to the Town Planning Department there is only one copy of this map available at the Town Offices and it is now out of date and needs to be updated.

Insert Map 3 Wetlands Conservation District here

Areas shown on this map as part of the Wetlands Conservation District may be used to fulfill up to 25 percent of the minimum lot size required by the Town's zoning and subdivision regulations, provided the minimum non-wetland area is contiguous and sufficient in size to adequately accommodate all required utilities such as sewage disposal and water supply. All contiguous areas must be 50 feet in width. Backlots, which are allowed in the Residential-Agricultural District but not in the Residential-One District, are required only to comply with the minimum area requirements of a frontlot. No septic tank, leach field or associated piping may be constructed within 75 feet of Hydric A soils or 50 feet of Hydric B soils. Currently, there are no building setback requirements to the edge of a wetland within this district. The Planning Board should consider implementing wetland building setbacks within this district. For more information about this district, refer to the Natural Resources chapter.

2.9.8 Groundwater Resources Conservation District

The purpose of the Groundwater Resources Conservation District is to protect, preserve and maintain existing and potential groundwater supply and groundwater recharge areas within known aquifers from adverse development, land use practices or depletion. This is accomplished by regulating land uses that could contribute polluted water and pollutants to designated aquifers identified as needed for present and future public and private water supply. The boundaries of this district encompass those areas which have been designated as having high and medium potential to yield groundwater as shown on the Town of New Boston Groundwater Conservation District map. The basis for this map is the "Availability of Ground Water in the Lower Merrimack River Basin, Southern New Hampshire," which was prepared by the U.S. Geologic Survey in cooperation with the New Hampshire Resources Board and dated 1977. According to the Town Planning Department there is only one copy of the Town of New Boston Groundwater Conservation Resource District Map available at the Town Offices and it is now out of date and needs to be updated.

The following activities and uses are prohibited within the Groundwater Conservation District:

- Disposal of solid waste other then brush and stumps,
- Subsurface storage of petroleum,
- Disposal of liquid or leachable wastes (except from residential, commercial or industrial systems which discharge human sanitary waste only),
- Industrial uses which discharge contact type process waters on site,
- Outdoor unenclosed or uncovered road salt,
- Dumping of snow containing de-icing chemicals,
- Commercial animal feedlots,
- Excavation of sand and gravel, except where conducted in accordance with a permit issued pursuant to RSA 155-E or when incidental to a permitted use,
- Disposal, processing or recycling of hazardous or toxic materials,
- Automotive service or repair shops,
- Junk and salvage yards, and
- Bulk storage of toxic materials.

Insert Map 4 Groundwater Conservation District here

Any use permitted in the underlying district is permitted within the Groundwater Resource Protection Conservation District except those uses, expressly prohibited as noted above, with the following limitations:

1) No more than 30 percent of any lot shall be rendered impervious by building and pavement;
2) Petroleum products, chemicals, road salt, and other materials which have the potential for contaminating groundwater shall be stored within a fully enclosed structure designed to contain any spill within the structure; and
3) Storm drainage facilities are designed so that normal infiltration to groundwater is retained.

In the case of any sand or gravel excavation permitted in accordance with RSA 155-E and the Town of New Boston Sand and Gravel Ordinance, such excavation or removal cannot be carried out within 4 vertical feet of the seasonal high water table. For more information about this district, refer to the Natural Resources chapter.

2.10 Recent Subdivision and Site Plan Activity

According to the 2004 Town Report, the Planning Board approved a total of 33 subdivision applications and 13 site plans. These subdivision applications resulted in a total of 64 new lots and 50 new seasonal campground trailer or tent sites. The site plans resulted in a new tractor repair and sales facility, a beauty salon, a boarding and riding stable, a new ice cream and garden stand, expansion of an existing tire sales business, expansion of a church, operation of a kennel and grooming facility, relocation of a comfort station at a campground, expansion of a campground adding 10 and 40 new tent sites, expansion of an existing truck and sales repair shop, and expansion of an existing day care facility.

In 2005, according to the Town Report, the Planning Board approved a total of 21 subdivision applications and 11 site plans. The subdivisions have resulted in a total of 69 new residential lots. The site plans resulted in a new gift shop, an architectural home office, expansion of an existing gravel operation, a new landscaping supply business, expansion of an existing self-storage facility, a law office and other professional offices, a new garage at the campground, expansion of an existing day care facility, and the operation of a private school.

So far in 2006, the Planning Board has approved a total of 12 new subdivision applications. These subdivisions have resulted in a total of 119 new lots. In addition, there are 6 subdivision plans pending approval before the Board. If these plans are approved, a total of 236 new lots could be approved in 2006.

The 64 new residential lots approved by the Planning Board in 2004 and the 69 new lots in 2005 are fairly consistent with the total number of building permits that have been issued by the Town (26 single-family permits in 2004 and 52 single-family and 2 duplex permits in 2005). It appears the number of approved residential lots and the number of single-family building permits issued every year has been fairly consistent since 2004.

3 HOUSING

3.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left in various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to housing in New Boston (additional questions on zoning of housing can be found in the Future Land Use chapter):

Please rate the following:

	Most Important	2	3	Least Important	No Response
Open rural character	**344**	114	20	10	15
Lowering property tax rate	**215**	129	108	36	15
Availability of affordable housing	67	122	**171**	125	18

Should clustering of dwellings on smaller individual lots in order to leave more open space be encouraged? (i.e. allowing smaller house lots with common open land)

Strongly Agree	Agree	Doesn't matter	Disagree	Strongly Disagree	No response
102	**134**	38	100	108	21

Should every subdivision over a certain size be required to provide open space?

Yes	No	No response
411	69	23

Should mixed use development be permitted in New Boston? (Single-family, multi-family and commercial uses could be included in a single development.)

Yes	No	No response	Not sure
179	**292**	33	4

Should there be a better tax break for the elderly to stay in their present homes?

Yes	No	No response	Not Sure
428	55	17	3

What types of new housing should the Town of New Boston allow?

	Strongly	Agree	Disagree	Strongly Disagree	No Response	Total Agree	Total Disagree
Single family home	304	158	19	6	23	**462**	25
Two family homes	63	217	100	77	46	**280**	177
Multi family dwellings	38	54	151	201	59	92	**352**
Senior housing	119	227	68	46	43	**346**	114
Manufactured housing	31	112	116	177	67	143	**293**
Condominiums	31	78	106	234	54	109	**340**
Housing for 55 years plus	104	228	77	48	46	**332**	125
Affordable/workforce housing	64	153	99	129	58	217	**228**

3.2 Goals and Objectives

Housing Goal

To encourage housing consistent with the small town, rural character of New Boston, while offering a range of residential living opportunities.

Housing Objectives

1. To allow for a range of housing types and choices within the Town's land use regulations.

    a. To continue to permit multi-family dwellings of an appropriate design and scale for the Town.

    b. To offer opportunities for low and moderate-income housing and to strive to attain New Boston's fair share of the regional affordable housing need.

    c. To investigate appropriate areas for senior housing development.

2. To investigate the possibility of allowing accessory apartments in buildings other than existing single-family homes.

3. To encourage a variety of housing options, including open space residential development.

4. To explore build-out densities as they relate to current zoning, in order to predict appropriate zoning modifications.

3.3 Introduction

The population of New Boston increased from 3,214 in 1990 to 4,138 in 2000. This represents an increase of 29 percent. The population is projected to increase to 4,840 by 2005, an increase of 17 percent since 2000. The actual population figures for 2000 and the revised projected population estimates for 2005, 2010, and 2015 fall in range with the projections reported in the 2000 revisions to the Master Plan by SNHPC and OEP. As a result, population estimates - while still estimates - should be considered accurate and used to plan for eventual growth. Such significant population increases can have serious impacts on a municipality. It is a purpose of the master plan to analyze the impacts of such a change on the community. In addition, in order to predict what demands are going to be placed on the town school, roads, groundwater, and septic systems, one must also determine future housing growth.

Growth in the number of housing units appears to be the most visible result of an increase in population. However, the distribution of that population in terms of age, economic stability, and family and household size can also have serious impacts on housing in a community. Beyond projecting future demand for housing and related land uses, it is important to examine how the influx of people has impacted the quality and affordability of housing available to the people of New Boston. Perhaps the means to achieve the desires of a community shift over time and as a result, all alternatives should be examined.

3.4 Regional Housing Trends

In order to get a clearer picture of the state of housing in New Boston, it is helpful to place it in a regional setting. According to the U.S. Census, the total number of housing units in Hillsborough County increased from 135,622 in 1990 to 144,455 in 2000, a 6.5 percent increase. During this same time, the amount of housing stock in New Boston increased by 28.5 percent. This is among the largest proportional housing increases in the area, as seen in Table 3.1. While growth rates in New Boston and its neighboring towns have slowed since the 1980s, when rates exceeded 60 percent for many towns, the region is still experiencing high growth. When the housing growth in the highly urbanized community of Bedford is removed from the picture, New Boston also ranks first among its more similar neighboring communities in terms of percent change in housing stock between 1990 and 2000, as seen in the following Table 3.1. However, based on data for 2004, New Boston is not continuing to experience double-digit growth increases.

Table 3.1
Change in Housing Stock, 1990-2004

Municipality	Number of Housing Units			1990-2000		2000-2004	
	1990	2000	2004	Increase	Percent Change	Increase	Percent Change
Amherst	3,179	3,752	4,064	573	18.02%	312	8.32%
Bedford	4,156	6,401	7,120	2,245	54.02%	719	11.23%
Francestown	580	656	711	76	13.10%	55	8.38%
Goffstown	5,022	5,798	5,760	776	15.45%	-38	-0.66%
Lyndeborough	488	587	669	99	20.29%	82	13.97%
Mt. Vernon	614	720	846	106	17.26%	126	17.50%
New Boston	**1,138**	**1,462**	**1,576**	**324**	**28.47%**	**114**	**7.80%**
Weare	2,417	2,828	3,158	411	17.00%	330	11.67%

Source: 1990 and 2000 US Census; SNHPC Annual Land Use Report 2004; OEP Current Estimates and Trends in NH's Housing Supply, 2004 Update (for non-SNHPC region towns' 2004 data)

Since New Boston's housing stock is primarily detached single-family, owner-occupied, the Town's average household size is greater than that of both Hillsborough County and the State of New Hampshire. Both the County and the State have greater percentages of multi-family housing which tends to decrease the average household size. In fact, condominiums, a type of housing that the community survey shows New Boston residents to be against, typically only generates, 0.12 school children per unit.[7]

According to the 2000 U.S. Census, the average household size in New Boston was 2.87 persons per unit. This is higher than the figures for both Hillsborough County (2.57) and New Hampshire as a whole (2.52). However, the average household size has decreased since 1990, when it was 3.02 persons per unit.

The decline in the average household size is further explained in a study by Russ Thibeault for the New Hampshire Housing Finance Authority on Housing and School Enrollment in New Hampshire: An Expanded View, May 2005. The study found that the conventional belief that each new housing unit generates 2 students is inaccurate. In 2000, according to the US Census, the typical New Hampshire housing unit actually generated 0.45 public school students. Furthermore, this figure is expected to further decline in the future. The reason for the high figures from 1990 to 2000 was the baby boom, which created a larger number of parents. However, this group had peaked by 2005 and the evidence supports minimal impacts on public schools due to increased supply of housing in New Hampshire. Rather than each housing unit creating an additional two school-aged children, the reality is that:

- Only 26 percent of the state's occupied housing units are occupied by a married couple with children under the age of 18 (including children not yet enrolled in school).

[7] Housing and School Generation in New Hampshire, An Expanded View, May 2005. http://www.nhhfa.org/programdocs/schoolstudy/SchoolStudy.pdf Accessed February 27, 2006.

- Thirty-three percent of the state's occupied housing units consist of a household head aged 55 or over – unlikely to have school age children.
- Twenty-four percent of the state's occupied housing units have only one person living in them.
- Thirty-one percent of the state's occupied housing units are occupied by non-family households, meaning no relatives, children or otherwise, occupy the unit.[8]

Furthermore, multi-family housing units generate even fewer school children per unit while providing a diverse housing stock. Single-family units generate 0.54 students per unit, two-family units 0.38, three or four unit buildings 0.34, five or more unit buildings 0.21, and mobile homes 0.34, for an average of 0.45 children per unit. Additionally, local data collected from Bedford, Hudson, Lebanon and Rochester for housing units built between 1998 and 2004 indicate that condominiums generate only 0.12 students per unit. Thus, not all housing units are creating the same amount of school enrollment. Overall, new single-family detached, two-family, multi-family consisting of three or more units, and mobile homes are not generating the burdensome growth in school population many believe it is. New Boston should consider conducting a similar study to determine if the findings of the New Hampshire Housing Finance Authority study hold true and if so, not limit new, diverse housing options based on the myth of housing and school enrollment.

3.5 Housing Stock

3.5.1 Housing Type

It is important to distinguish between the various types of housing since a diverse housing stock is able to better serve the needs of different segments of the population. Like many small towns, New Boston's housing supply is primarily made up of single-family homes (see Table 3.4 on following page). Building permits issued from 2000 through 2005 indicate that housing growth is overwhelmingly single-family homes (see Table 3.2 below). During this time, only five multi-family/two-family homes and one mobile home were added to New Boston's total housing stock.

Table 3.2
Number of Building Permits Issued by Housing Type,
New Boston, 2000 - 2005

Number of Building Permits Issued	2000	2001	2002	2003	2004	2005	Total
Single Family	70	54	57	51	26	52	310
Multi-Family and Two Family	1	1	1	0	0	2	5
Mobile Homes	1	0	0	0	0	0	1
Total	72	55	58	51	26	54	316

Source: SNHPC Annual Land Use Reports, 2000-2004

[8] Ibid.

As indicated in Table 3.3 on the following page the number of housing units in New Boston has grown from 1,138 in 1990 to 1,576 in 2004, an overall increase of 38 percent. In the previous decade from 1990 to 2000, the number of housing units in New Boston increased 28 percent. This increase was the second highest growth rate among neighboring towns. Only the Town of Bedford experienced a higher growth rate in housing than New Boston during this time period.

Between 2000 and 2004, however, the number of housing units in New Boston grew at only 7.8 percent, which was at the lower end of the growth rates of all the surrounding towns. The Town of Goffstown had the lowest housing growth rate during this time period.

Table 3.3
Housing Growth, New Boston and Surrounding Towns

Municipality	Number of Housing Units			1990-2000		2000-2004	
	1990	2000	2004	Actual Change	Percent Change	Actual Change	Percent Change
Amherst	3,179	3,752	4,064	573	18.02%	312	8.32%
Bedford	4,156	6,401	7,120	2,245	54.02%	719	11.23%
Francestown	580	656	711	76	13.10%	55	8.38%
Goffstown	5,022	5,798	5,760	776	15.45%	-38	-0.66%
Lyndeborough	488	587	669	99	20.29%	82	13.97%
Mt. Vernon	614	720	846	106	17.26%	126	17.50%
New Boston	**1,138**	**1,462**	**1,576**	**324**	**28.47%**	**114**	**7.80%**
Weare	2,417	2,828	3,158	411	17.00%	330	11.67%

Source: 1990 and 2000 US Census; SNHPC Annual Land Use Report 2004; OEP Current Estimates and Trends in NH's Housing Supply, 2004 Update

Table 3.4
New Boston Housing by Type

Year	Single Family (Units)	Two Family (Units)	Multi-Family (Units)	Manufactured Housing (Units)	Total Units
2004	1,304	206	28	44	1,582
2003	1,256	206	28	44	1,534
2002	1,209	206	28	44	1,487
2001	1,153	200	28	44	1425

Source: SNHPC Annual Land Use Reports 2002, 2003 & 2004

3.5.2 Housing Characteristics

The 2000 Census characterizes the typical New Boston home as having between two and four bedrooms (24 percent have two bedrooms; 46 percent have three bedrooms; 21 percent have four bedrooms). Five percent have one bedroom, three percent have five or more bedrooms, and one percent has no bedrooms.

3.5.3 Housing Condition

The overall condition of the housing stock cannot be described by a single criterion. A number of physical characteristics, such as the age of the structure, the type of plumbing and heating facilities, and occupancy conditions, such as overcrowding, are used to provide an approximate assessment of the quality of a municipality's housing stock.

The age of housing is one general indicator of quality. Older houses may be experiencing structural problems or increasing maintenance costs, may not be as energy-efficient as newer homes, or may need replacement of electrical wiring or plumbing. Approximately 20 percent of the existing housing units in New Boston were built before 1939. Few units were constructed over the next three decades (only 11 percent of the units were constructed between 1940 and 1969). Most of the housing units have been constructed since 1970. This relates to the Town's growth in population. Approximately 1,004 units, or 69 percent of the housing, were constructed between 1970 and 2000. The majority of housing in New Boston is therefore more likely to meet modern standards for energy and electrical efficiency with fewer maintenance issues.

Table 3.5
New Boston Housing Stock by Year Structure Built, 2000

Year Structure Built	Actual	Percentage
1990-2000	376	26%
1980-1989	484	33%
1970-1979	144	10%
1960-1969	92	6%
1950-1959	27	2%
1940-1949	44	3%
Prior to 1939	295	20%
Total Housing Units	1462	100%
Occupied Housing Units	1,434	98%
Owner-Occupied	1,246	87%
Renter-Occupied	188	13%

Source: US Census 2000, SF-3, H7, H34

In evaluating the number of substandard units in Town, three factors (overcrowding, the lack of plumbing facilities, and the lack of heating facilities) are frequently considered. More than one person per room is the statistical standard used by the U.S. Census to describe overcrowding. In New Boston, only 35 units (2.4 percent of the occupied housing) exceed this standard. This was slightly greater than the 2 percent rate for Hillsborough County and significantly greater than the rates of surrounding towns (Francestown and Goffstown both had a 0.9 percent rate and Lyndeborough had a 1.25 percent rate). According to the 2000 Census, 30 units, or 2 percent of total housing units, lacked complete plumbing facilities. There were no housing units in New Boston with inadequate heating facilities. None of the units without complete plumbing had occupancy greater than one person per room, thus bringing the substandard housing stock total to 65 based on overcrowding and incomplete plumbing.

3.5.4 Housing Tenure

In 1990, 86 percent (904 units) of the housing units in New Boston were owner-occupied and 14 percent (150 units) were renter occupied. Those proportions have stayed consistent through the 2000 Census, with 87 percent (1,246 units) of the housing owner-occupied. The remaining 190 units were renter-occupied. This indicates the Town's mix of owner-occupied and renter-occupied housing has remained stable. However, a stable mix might mean there have not been enough rental units added to the housing stock, rather than a lack of need for rental units.

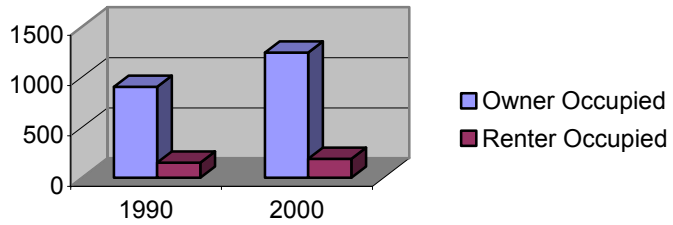
Table 3.6
Renter Occupied Units, 1990-2000

Town	1990	2000	Percent Change
Amherst	270	273	1.11%
Bedford	277	744	168.59%
Francestown	44	74	68.18%
Goffstown	981	1,136	15.80%
Lyndeborough	51	68	33.33%
Mont Vernon	47	54	14.89%
New Boston	**150**	**190**	**26.67%**
Weare	260	340	30.77%

Source: US Census

Figure 3.1 below shows the housing increases between 1990 and 2000 for owner occupied and renter occupied housing units. This figure illustrates that owner occupied units are increasing faster than renter occupied units. Table 3.6 shows the rates of renter-occupied unit increases among New Boston and its neighboring towns. By adding 40 renter-occupied units in ten years, New Boston ranks on the low end of proportional rental unit additions. New Boston is surpassed both by the large town of Bedford with a 169 percent increase and the smaller towns of Francestown and Lyndeborough, with 68 percent and 33 percent increases, respectively

Figure 3.1
New Boston Housing 1990 vs 2000



Source: US Census

3.5.5 Homeowner Characteristics

Table 3.7 on the following page shows the age distribution of homeowners in New Boston and neighboring towns. Of 1,246 resident homeowners, approximately half are under the age of 45 and half are over the age of 45. More significant, however, is the fact that over 20 percent of homeowners are 34 years of age or younger, a larger proportion than any surrounding town.

Table 3.7
Age of Homeowners, 2000
New Boston and Surrounding Towns

Municipality	Percent of Homeowners 34 Years Old or Younger	Percent of Homeowners 35-44 Years Old	Percent of Homeowners 45-64 Years Old	Percent of Homeowners Over 65 Years Old	Total Homeowners
Amherst	11.3%	30.1%	45.1%	13.4%	3,318
Bedford	8.7%	30.9%	44.7%	15.8%	5,530
Francestown	12.0%	25.5%	45.7%	16.8%	475
Goffstown	13.2%	28.7%	39.4%	18.6%	4,507
Lyndeborough	11.2%	29.4%	45.1%	14.3%	490
Mont Vernon	8.1%	33.0%	43.4%	15.5%	640
New Boston	**20.5%**	**31.1%**	**39.1%**	**9.2%**	**1,246**
Weare	18.0%	39.4%	33.5%	9.1%	2,278

Source: 2000 U.S. Census

3.5.6 Vacancy Rates

Vacancy rates are an indicator of housing demand and supply in the marketplace. A low vacancy rate signifies a lack of choice in the housing market, resulting in higher housing prices and a lack of mobility within the market. Conversely, a high vacancy rate indicates a glut of stock on the housing market, which will drive housing prices down and provide prospective occupants with significant options. The 2000 Census reported the overall vacancy rate in New Boston to have been 2 percent. This figure allows no distinction between owner-occupied and rental units. At the same time, the overall vacancy rate for Hillsborough County was 3.8 percent. Both the County and the Town have decreased vacancy rates from 8 percent in 1990. Vacancy rates of 2 percent for owner-occupied units and 6 percent for rental units are suggested as indicators of a "healthy" housing market, which places New Boston well within the "healthy" range.

3.5.7 Housing Costs

Housing affordability is a function of both income and housing cost. Based on the 2000 Census, the median monthly mortgage cost for owner-occupied housing in New Boston was $1,291. The median monthly rental housing costs, excluding the cost of utilities, was $806. Information provided by the New Hampshire Housing Finance Authority (NHHFA) reported that in 2000, the median value of a new home in Hillsborough County was $135,500, less than the New Boston average, which was $148,000. Based on Authority and Census data, in 2000 an annual income of $32,240 was needed to afford a two-bedroom rental unit in New Boston.

Affordable housing has become an increasingly pressing issue in New Boston. In 2005, the average sales price for a single-family home in New Boston was $386,162. In order to purchase an average priced home in New Boston a family must make at least $112,282. According to the 2000 US Census, the median household income in New Boston was $66,020. The upper limit median household income for New Hampshire was approximately $58,000 in 2004 dollars adjusted for inflation, which indicates little change in the median household income over the last five years.

The need for affordable housing is determined by the mean area income (MAI). A large proportion of residents making more than 50 to 80 percent of the MAI and/or paying 30 to 35 percent of their total income towards housing can indicate a need for affordable housing. Data compiled by Manchester Neighborhood Housing Services, Inc. in early 2006 indicate that people employed in many common occupations cannot afford to live in New Boston.

Table 3.8
Housing Affordability by Occupation

Occupation	Location	Average Income*	Percent of Median**	Hourly Wage	Maximum Affordability ***	Number of Single-Family Units for Sale ****	Number of Condo Units for Sale	Maximum Rent
Bank Teller	New Boston	$22,778	34%	$10.95	$15,229	0	0	$413
Public Works Worker	New Boston	$26,354	39%	$12.67	$30,049	0	0	$503
Retail Store Clerk	New Boston	$38,923	58%	$18.71	$82,139	0	0	$817
Elementary School Teacher	New Boston	$42,765	64%	$20.56	$98,062	0	0	$913
Registered Nurse	Manchester	$43,437	65%	$20.88	$100,847	0	0	$930
Computer Network Manager	Manchester	$76,615	114%	$36.83	$238,348	1	0	$1,759

* Average Income from Salary Expert.com – Occupational Employment Statistics
** Area Median Income as determined by HUD 3/31/05 for Manchester MSA & Hillsborough County
*** Affordability with 3% downpayment, NHHFA Mortgage @ 6.025% including PITI (not including HOA/Condo Fees)
**** Current number of listings in New Boston at NNEREN.com (out of 63 single-family and 4 condo listings) 1/26/06 ranging in price from $210,000 - $795,000
\+ Data compiled by Manchester Neighborhood Housing Services, Inc.

As seen in Table 3.9 on the following page, those households with lower incomes consistently paid a greater percentage of their income towards housing. Since affordable housing is defined as housing for individuals or families of low and moderate income in which housing cost does not require more than thirty percent of income, it would appear that New Boston housing is only affordable to those households who earn more than $50,000 per year. A large majority (67 percent) of those households earning between $20,000 and $35,000 annually spend over 35 percent of their income on housing, and 100 percent of the lowest income households (those making less than $20,000) spend over 35 percent on housing.

Table 3.9
Affordable Housing Needs for New Boston

	Renter Occupied Households					Owner Occupied Households				
	Total Number of Renter Households	Under 50% MAI	Under 50% MAI & Pay 35%+	Under 80% MAI	Under 80% MAI & Pay 30%+	Total Number of Owner Households	Under 50% MAI	Under 50% MAI & Pay 35%+	Under 80% MAI	Under 80% MAI & Pay 30%+
Number	190	62	36	122	61	1,244	142	71	244	159
Percent	13.2%	4.3%	2.5%	8.5%	4.3%	86.8%	9.9%	5.0%	17.0%	11.1%

Source: 2000 U.S. Census

Table 3.10
Number of Households by Percent of Income Spent on Housing - New Boston, 1999

Income	Percent of Income Spent*					
	Less than 20%		20% - 34%		35% or More	
	Owner	Renter	Owner	Renter	Owner	Renter
Less than $20,000	0	0	0	0	21	14
$20,000 - $34,999	7	0	23	18	67	30
$35,000 - $49,999	26	12	39	29	49	0
$50,000 - $74,999	99	25	185	5	15	0
$75,000 - $99,999	105	18	86	0	13	0
$100,000 or more	142	9	61	0	0	0

Source: 2000 U.S. Census, SF-3, H73, H97
*A small percentage of households did not have data computed.

Based on the community survey results, New Boston residents strongly agree with providing affordable housing options for seniors. 66 percent of respondents either strongly agreed or agreed that New Boston should allow housing for 55-years plus. 69 percent of respondents strongly agreed or agreed that New Boston should allow senior housing. Fully 85 percent of respondents felt there should be a tax break to allow seniors to remain in their homes. With an aging population, the temptation to build affordable or luxury age-restricted housing is strong. However, a glut of age-restricted housing can inhibit economic development as well as lead to a lack of a diverse housing stock and the Town should be wary of adding too many age-restricted housing developments.

The current lack of affordable housing has developed over the past ten years, in part from escalating housing prices in New Boston. It can be assumed that the cost of housing will continue to rise. As New Boston continues to grow, it will be important to provide affordable housing opportunities to current residents as well as new residents. Without affordable housing, many town residents, especially the young adult working force and elderly populations, may be forced to seek affordable housing elsewhere.

3.6 Future Housing Needs

3.6.1 Housing Projections

Housing projections are important since the total number and types of new housing units can be used for planning purposes to help predict how much land will be needed for increased residential development, and where that development should be located. The housing projections produced here are based upon the population projections developed by the New Hampshire Office of Energy and Planning (OEP) for the New Boston Master Plan and assume that housing production will directly parallel population growth. Using the projected population, an estimate of the total number of households, or occupied dwelling units, was calculated for each projected year using the 2000 average household size and assuming that household sizes will decrease by 0.5 percent every five years.

The total occupied housing units was distributed to renter and owner households for each projected year by assuming that each form of tenure would retain its 2000 share of the total dwelling units. Lastly, additional units were added to the total to allow for vacant units. This calculation assumed the vacancy rate for ownership units will be 1.5 percent and rental housing will be five percent for all projected years.

The total increase in housing units required to support the projected population growth for the Town of New Boston will result in a 52 percent increase in the number of dwelling units from 2000 to 2025, an additional 752 units. Only 265 of all units in 2025 will be rental units. The remainder are projected ownership units.

Table 3.11
New Boston Dwelling Unit Projections, 2000 - 2025

Tenure and Occupancy	2000 Census	Projected				
		2005	2010	2015	2020	2025
Total Dwelling Units*	1,445	1,689	1,824	1,956	2,076	2,197
Total Ownership Units	1,250	1,485	1,603	1,720	1,825	1,931
Owner Occupied Units	1,244	1,463	1,579	1,694	1,798	1,902
Vacant Units for Sale	6	22	24	26	27	29
Total Rental Units	195	204	220	236	251	265
Renter Occupied Units	190	194	209	224	238	252
Vacant Units for Rent	5	10	11	12	13	13

*Excludes Seasonal Housing
Sources: OEP New Boston Population Projections, 2000 U.S. Census

3.6.2 'Fair Share' Affordable Housing

Recent court cases have made it clear that all New Hampshire communities must ensure through their land use regulations that affordable housing can be built within their boundaries.[9] Again, affordable housing is defined as housing for individuals and families of low and moderate income (LMI), in which housing costs do not require the expenditure of more than thirty percent of household income. A low-income household, by definition, earns less than fifty percent of the median family income in its relevant

[9] See *Britton v. Town of Chester*, 134 NH 434 (1991).

geographic area, while a moderate-income household earns less than eighty percent of the median area income (MAI). It is important to note, however, that increasingly those earning 100 to even 120 percent of the median area income are in need of affordable housing.

Table 3.12 below shows a projection of the Southern New Hampshire Planning Region's affordable housing needs for 2000 and 2010. In 2000, New Boston only had 61 households qualifying as affordable for low and moderate income residents, but according to the regional Fair Share Distribution, the Town should have 434 affordable housing units available. Furthermore, this number should increase to 501 by 2010.

Table 3.12
Regional Distribution of Fair Share Housing

Municipality	2000		2010	
	Number of Households	Fair Share Distribution	Number of Households*	Fair Share Distribution
Auburn	19	272	23	314
Bedford	170	1,029	204	1,198
Candia	7	324	8	374
Chester	20	302	24	348
Deerfield	32	493	38	571
Derry	1,404	984	1,688	1,206
Goffstown	361	684	434	807
Hooksett	271	620	326	742
Londonderry	260	1,135	313	1,313
Manchester	7,923	3,499	9,527	4,430
New Boston	**61**	**434**	**73**	**501**
Raymond	241	489	290	569
Weare	131	634	158	732
SNHPC Total	**10,900**	**10,900**	**13,106**	**13,106**

Source: SNHPC Housing Needs Assessment 2004
*Equals the 2000 number of households projected at a 1.8604% annualized growth rate, derived from the average of the four dwelling unit projections for renter occupied households as established in Table 9 of the SNHPC Housing Needs Assessment 2004 report.

While there is no set way of determining the actual number of dwelling units needed for low to moderate income households in a given community, it is possible to estimate such needs by deriving "fair share" estimates from the available data. The "fair share" concept relies on the assumption that all communities have an obligation to accommodate a "reasonable" proportion of a region's low to moderate-income households.

For planning purposes it is useful to estimate the total number of low and moderate income (LMI) affordable units needed in a community. In fact, New Hampshire RSA 674:2, III, states that a master plan should contain a housing section which "addresses current and future housing needs of residents of all levels of income of the municipality and the region in which it is located, as identified in the regional housing needs

assessment performed by the regional planning commission pursuant to RSA 36:47,II." In New Boston's case, the relevant region is the thirteen-community Southern New Hampshire Planning Commission (SNHPC) region. The Commission calculated New Boston's LMI housing needs along with the LMI housing needs of the other twelve SNHPC communities for the base year 2000 and projected needs in 2010 (see Table 3.12).

The Commission utilized a "fair share" formula developed by Bruce Mayberry of the New Hampshire Housing Finance Authority in order to determine the LMI housing needs of communities within the planning region. The new NHHFA method developed four models (A through D) that each reviews a different level of need. All four of the models use a series of weighted factors to determine each community's percent "fair share" of the region's low income housing supply. These factors represent a community's ability to support moderate and low-income housing and remain economically viable. Additionally, each model uses a separate set of factors to calculate the distribution of elderly or age 65 plus and family age households.

The SNHPC maintains that the estimate produced by using the fair share formula is only a guideline to which each community should refer in meeting its goal of increasing the housing supply and providing affordable housing. It provides a mechanism by which each community can assess its fair share needs relative to other communities in the region.

4 ECONOMIC DEVELOPMENT

4.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left in various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to economic development in New Boston:

Do you want the Town to encourage industrial development?

Yes	No	No response	Not sure
125	**338**	36	4

Do you want the Town to encourage commercial development?

Yes	No	No response	Not sure
210	**254**	34	5

What types of businesses would you like to see in New Boston? Check all that apply.

Industrial	135
Small retail	375
Large retail	**19**
Restaurant/food service	371
Medical	304
Professional office	287
Services	219
Recreation	103

Please rate the following:

	Most Important	2	3	Least Important	No Response
Maintaining traditional village district	**285**	153	42	15	8
Lowering property tax rate	**215**	129	108	36	15

The above survey results indicate respondents are overwhelmingly against encouraging industrial development. Also, for the most part respondents are against encouraging commercial development. However, based on the types of businesses people would like to see in New Boston, clearly some type of economic development is desired. Definitely

not big-box retail strip mall development, but a wider variety in restaurant choices, professional offices, medical and other services and smaller retail establishments would be welcomed based on the survey. These types of establishments, of an appropriate scale for New Boston, could enhance the quality of life of residents without sacrificing the Town's rural identity.

Ironically, most residents rank highly the preservation of the village district as well as a lower property tax rate, both of which could be sustained through careful economic development. Keeping this in consideration, small-scale retail, food services and professional offices within the village setting could serve as an ideal way for New Boston to diversify its tax base and reduce property tax rates.

The economic health of a town is essential to both its overall well-being and its future. The economy of a town like New Boston, where most of its residents work outside of town, is particularly dependent upon the economic vitality of other communities in the region as well as the region's economy as a whole. However, if New Boston does not make efforts to diversify its own employment and economic base, it may become vulnerable during economic downturns and subject to ever-increasing property taxes. Therefore New Boston must work to achieve a balance between community character and a diversified economic sector.

This chapter will discuss the current economic situation in New Boston, including the current conditions impacting economic development and past economic strategies. The chapter will also make recommendations to facilitate business development that is compatible with New Boston's scale and rural character.

4.2 Goals and Objectives

Commercial Development Goal

To promote limited commercial development consistent with the Town's needs and desires and in keeping with the Town's rural character and ability to provide services.

Commercial Development Objectives

1. To continue to refine the Town's ordinances and regulations to make them proactive regarding site design aesthetics for future commercial development in Town.

2. To provide for small scale retail uses and services strategically located to benefit residents of diverse geographic areas within Town.

3. To encourage home businesses in areas where appropriate and subject to applicable guidelines.

4. To establish an economic development committee to provide a forum for discussion of local economic issues and to explore commercial opportunities.

Industrial Development Goal

To evaluate limited light industrial development potential for the Town of New Boston.

Industrial Development Objectives

1. To evaluate sites for industrial uses which have suitable development potential and good transportation access.

2. To evaluate industrial uses which will not adversely affect the environmental or historic character of the Town, create excessive noise, traffic or light pollution, and which are appropriate in terms of scenic values.

Town Center Goal

To provide a mix of mutually supportive uses, both business and residential, that will perpetuate and enhance the Town Center's role as a gathering place, commercial and municipal center, and hub of community activities. The intent is to serve local, regional and visitors' markets within a pedestrian-oriented environment, while ensuring compatibility with the existing community character and heritage.

Town Center Objectives

1. To further investigate the concept of establishing a village district.

2. To investigate and create innovative, alternative parking options in the village.

3. To preserve the rural, small town character of the Town Center in keeping with its Victorian heritage and other architectural styles.

4. To investigate the feasibility of establishing a municipal water system and either a municipal sewer system or common septic systems to serve the Town Center.

5. To encourage the establishment and maintenance of green spaces, open spaces, and landscaped areas in the Town Center and linkages between them.

6. To work with the NHDOT to reduce pedestrian and vehicular conflicts, and to improve pedestrian safety.

7. To develop safe pedestrian walkways in accordance with the recommendations of the Livable Walkable Communities study.

8. To investigate ways to controll noise, exhaust and light pollution in the village.

9. To investigate funding options such as Community Development Block Grants and the Main Street Program.

4.3 Characteristics of the Resident Labor Force

When considering small-scale economic development in a rural town, the current economic characteristics of the community can help determine what will be the most compatible businesses and can also be used to assess the potential for development. The following economic data confirms New Boston's human resources as well as current levels of income, unemployment, and commuting.

In 2004, the size of the resident labor force in New Boston was 2,808, with 2,728 employed persons and 80 unemployed persons, for an unemployment rate of 2.8 percent. In 1994, the civilian labor force was 2,034, with a 2.0 percent unemployment rate. The labor force increased by 38 percent, slightly less than the population increase of 47 percent between 1990 and 2003. This indicates a marginally higher proportion of children and retired adults living in New Boston, yet it simultaneously indicates a sizeable workforce proximate to potential new businesses in Town. According to the 2000 Census, the largest number of New Boston residents work in management, professional, and related occupations (see Table 4.1 below). Sales and office occupations are the next largest category.

Table 4.1
Occupation for Employed Persons 16 and Over

Occupation	2000	Percent
Management, professional, and related occupations	994	42.88%
Service occupations	248	10.70%
Sales and office occupations	526	22.69%
Farming, fishing, and forestry occupations	6	0.26%
Construction, extraction, and maintenance occupations	257	11.09%
Production, transportation, and material moving occupations	287	12.38%
Total	2318	100%

Source: US Census 2000, SF-3, P50

4.4 Place of Employment

The vast majority - 81 percent - of New Boston residents work outside of New Boston, a ratio that has stayed consistent throughout the last decade. A small percentage of residents work out of state, but the majority of residents work in New Hampshire. Additionally, most residents work within Hillsborough County. New Boston businesses and government employs 371 people or 19 percent of the workforce. Forty-six percent of New Boston employees also live in New Boston and 54 percent do not.

Table 4.2
Employment by Place of Work - New Boston, 1999

Employed Residents over 16 Years of Age		
Place of Work	Persons	Percent
New Boston	371	19.12%
Hillsborough County	1475	76.03%
New Hampshire (except Hillsborough County)	321	16.55%
Outside New Hampshire	144	7.42%

Source: US Census 2000, SF-3 P26, MCD-to-MCD Worker Flow Files, State of New Hampshire, Work MCD

4.5 Travel to Work

While the percentage of workers commuting outside of the community has remained constant, the travel time has increased as traffic congestion and growth have increased. The mean travel time to work in 1990 was 29.3 minutes, which increased to 32.7 minutes in 2000. Additionally 21.9 percent of working residents drove over 45 minutes to work daily in 2000, up from 18.2 percent in 1990.

Table 4.3
Travel Time to Work for Workers 16 Years and Over

Minutes	1990	Percent	2000	Percent
Less than 5 minutes	60	2.7%	65	2.8%
5 to 14 minutes	201	11.7%	206	8.9%
15 to 29 minutes	526	30.6%	586	25.4%
30 to 44 minutes	562	32.7%	841	36.4%
45 minutes or more	312	18.2%	505	21.9%
Work at home	58	3.4%	108	4.7%

Source: 1990 Census, SF-3, P50 and 2000 Census, SF-3, P31

Table 4.4
Travel Method to Work for Workers 16 Years and Over

Travel Method	1990	2000
Drove alone	79.10%	82.40%
Carpooled	14.10%	10.50%
Public Transportation (including Taxi)	0%	0.50%
Bicycled or walked	3%	1.30%
Motorcycle or other means	0.50%	0.60%
Mean travel time to work	29.3	32.7

Source: 1990 Census, SF-3, P49 and 2000 Census, SF-3, P30

4.6 Occupation and Income

In 1994, 379 New Boston residents were employed within the town, a number that has grown by over 50 percent to 582 employed residents in 2004. The increase of employed New Boston residents exceeds the growth rates of both the population and total resident workforce, indicating a stronger overall economy. The most significant growth has been in the service providing industry, which includes sales and professional, managerial, and

retail services. The field of Goods Producing Industries has actually decreased by six employees since 1994, although wages in the field have more than doubled.

Table 4.5
Employment in New Boston by Industry, 1994-2004

Industry	1994	2004
Goods Producing Industries		
Average Employment	85	79
Average Weekly Wage	$337	$733
Service Providing Industries		
Average Employment	153	343
Average Weekly Wage	$320	$563
Total Private industry		
Average Employment	238	423
Average Weekly Wage	$326	$595
Government (Federal, State, and Local)		
Average Employment	141	160
Average Weekly Wage	$457	$617
Total, Private Industry plus Government		
Average Employment	379	582
Average Weekly Wage	$375	$601

Source: New Boston Community Profiles

The average weekly wage for those employed in New Boston has grown to $601 in 2004, up from $375 in 1994. These numbers indicate a job growth trend with higher salaries for the New Boston workforce. There are 166 employers in the Town of New Boston. The service industry contains the most businesses. There are a wide variety of businesses classified as service industry; day care services and automotive repair shops are the most numerous within the category. The construction and retail trade industries contain the second and third largest number of businesses. General contractors of single-family homes make up the largest segment of the construction industry businesses, with site work, electrical, plumbing and heating and other contractors rounding out the industry. There are a wide variety of retail trade businesses in New Boston, with no one type dominating the mix. Table 4.6 lists the number of employers by industry group title. The number of employees within each business is unknown. Many businesses are likely family-owned and operated and thus do not offer widespread employment opportunities for residents.

Table 4.6
New Boston Employers by Industry Group Title

Industry (SIC) Group Title	Quantity
Agriculture, Farming, Fishing	7
Construction	32
Finance, Insurance, and Real Estate	10
Manufacturing	14
Public Administration	10
Retail Trade	29
Services	51
Transportation and Public Utilities	3
Unclassified	1
Wholesale Trade	9
Total Employers	166

Source: NH Network Employer Search by Industry (SIC) Group Title
February 2006

New Boston's Per Capita Income, as reported by the 2000 Census, was $26,488. The median household income was $66,020 and 3.1% of families lived below the poverty level in 1999.

Table 4.7
Number of Households by Household Income

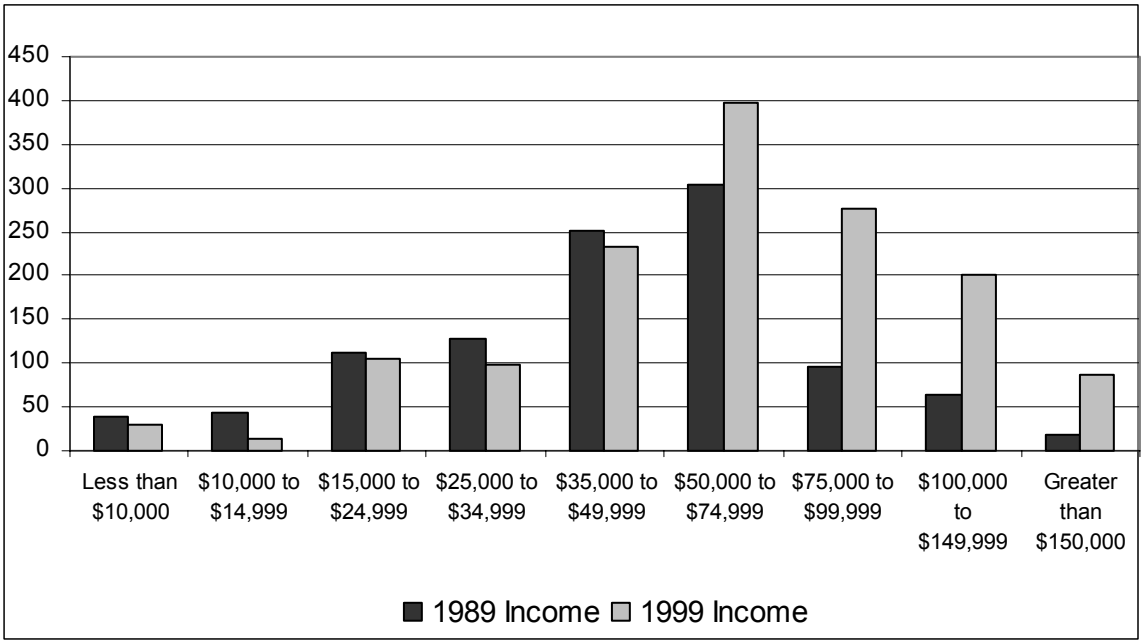
Household Income	1990	Percent	2000	Percent
Less than $10,000	39	3.7%	29	2.1%
$10,000 to $19,999	71	6.7%	42	3.0%
$20,000 to $29,999	132	12.5%	96	6.8%
$30,000 to $39,999	163	15.5%	151	10.7%
$40,000 to $49,999	167	15.9%	161	11.4%
$50,000 to $59,999	144	13.7%	120	8.5%
$60,000 to $74,999	159	15.1%	278	19.7%
$75,000 to $99,999	97	9.2%	276	19.6%
$100,000 to $124,999	48	4.6%	112	7.9%
$125,000 to $149,999	15	1.4%	90	6.4%
$150,000 or more	18	1.7%	86	6.1%
Total Households	1053	100	1441	100.0%

Source: US Census 1990, SF-3, P80 and US Census 2000, SF-3, P52

As evidenced by Table 4.7 and Figure 4.1, overall household incomes have increased in the past decade. While the town has added nearly 400 households since the 1990 Census, the percentage of those earning more than $60,000 a year has increased even more substantially. Sixty percent of households earned over $60,000 in 2000, compared with only 32 percent in 1990. More than 12 percent of households earned over $125,000, compared with just three percent in 1990. These figures indicate that the average household income is increasing considerably, which has impacts on economic

development, employment, housing, and municipal services. The 2000 Census shows a fairly even distribution of household incomes, with significant numbers of New Boston residents throughout the income distribution scale.

Figure 4.1
New Boston Household Income, 1989-1999



Source: US Census 1990, SF-3, P80 and US Census 2000, SF-3, P52

Despite the Town's increasing household incomes, there still remains a critical population living below the poverty line. According to the 2000 Census, median family income for a four-person family is $69,458, with 3.1 percent of families living below the poverty level. The number and age of individuals with families in New Boston with incomes in 1999 below the poverty level are shown in Table 4.8. Poverty rates in New Boston have decreased significantly through the 1990s. The most significant gains have been in the 75 years and over age-category, where the poverty rate went from 11.4 percent in 1989 to zero in 1999. However, as indicated in Table 4.8 below, there has been

Table 4.8
Income below Poverty Level, 1989 - 1999

	1989	Percent	1999	Percent
Total residents	3,064	100	4,107	100
Individuals below poverty line	149	4.86%	178	4.33%
Under 5 years	30	20.13%	7	3.93%
5 to 17 years	25	16.78%	72	40.45%
18 to 64 years	71	47.65%	90	50.56%
65 to 74 years	6	4.03%	0	0.00%
75 years and over	17	11.41%	0	0.00%

Source: US Census 1990, SF-3, P117 and US Census 2000, SF-3, P87

an increase in the number of children 5 to 17 years of age who live in poverty from 16.78 percent in 1989 to 40.45 percent in 1999, pointing to an important economic challenge.

4.7 Future Employment Trends

As in many rural bedroom communities, New Boston's future economic well-being is closely linked with the economic climate of southern New Hampshire. Assuming that southern New Hampshire's economic prosperity continues, New Boston residents will have favorable employment opportunities within a reasonable distance of their homes. The region's economic prospects should be viewed as a catalyst for New Boston's own economic development in order to expand ventures on a local level.

Situated in the center of Hillsborough County, New Boston residents are likely to be affected by the employment trends for the county. The industries in Hillsborough County expecting the largest percentages of growth between 2002 and 2012 are Health Care and Social Assistance (36 percent), Information (33 percent), Professional and Technical Services (27.5 percent), and Accommodation and Food Services (25 percent). A 31.5 percent decrease is expected in Agriculture-related jobs and an eight percent decrease in Management of Companies and Enterprises.

Table 4.9
Employment Projections by Industry for Hillsborough County, 2002-2012

INDUSTRY	Base 2002	Projected 2012	Actual Change	Average Annual Percent Change	Percent Change
Total Employment, All Occupations	202,181	231,790	29,609	1.4	14.6
Goods Producing Industries	42,091	40,031	-2,060	-0.5	-4.9
Agriculture, Forestry, Fishing, and Hunting	213	146	-67	-3.7	-31.5
Mining	46	18	-28	-9	-60.9
Manufacturing	33,952	31,040	-2,912	-0.9	-8.6
Construction	7,880	8,827	947	1.1	12
Service Providing Industries	146,275	177,785	31,510	2	21.5
Utilities	*	*	*	*	*
Wholesale Trade	7,911	9,687	1,776	2	22.4
Retail Trade	27,992	33,693	5,701	1.9	20.4
Transportation and Warehousing	6,184	7,155	971	1.5	15.7
Information	5,301	7,065	1,764	2.9	33.3
Finance and Insurance	10,587	11,916	1,329	1.2	12.6
Real Estate and Rental and Leasing	2,789	3,090	301	1	10.8
Professional and Technical Services	9,418	12,010	2,592	2.5	27.5
Management of Companies and Enterprises	1,862	1,717	-145	-0.8	-7.8
Administrative and Waste Services	7,582	8,814	1,232	1.5	16.2
Educational Services	13,385	16,092	2,707	1.9	20.2
Health Care and Social Assistance	22,138	30,087	7,949	3.1	35.9
Arts, Entertainment, and Recreation	1,932	2,217	285	1.4	14.8
Accommodation and Food Services	13,911	17,399	3,488	2.3	25.1
Other Services, Except Public Administration	6,305	7,304	999	1.5	15.8
Total Government	8,312	8,825	513	0.6	6.2
Self-Employed and Unpaid Family Workers	13815	13974	159	0.1	1.2

Note: * indicates non-discloseable data. Due to non-discloseable data, the sum of all industries does not add up to the total of all employment.
Source: Economic & Labor Market Information Bureau, NH Employment Security

Table 4.10 on the following page shows the projected employment for New Boston and surrounding towns. New Boston is projected to gain over 300 non-retail jobs in the next decade. At least part of this influx will result from the continued population growth and the construction and service jobs that will follow in its wake. New Boston can harness its

employment potential by recruiting businesses that will best match its resident workforce, creating a diverse tax base and allowing New Boston residents to live and work within their community.

Table 4.10
Employment Projections by Town, 2000-2015

Municipality	2000 Employment		2015 Employment		Percent Change	
	Retail	Non-Retail	Retail	Non-Retail	Retail	Non-Retail
Goffstown	976	3,157	1,056	4,718	8.2%	49.4%
Hooksett	1,660	5,183	2,636	8,660	58.8%	67.1%
Manchester	12,277	54,760	14,610	66,456	19.0%	21.4%
New Boston	**77**	**344**	**80**	**666**	**3.9%**	**93.6%**
Weare	161	1,147	245	1,949	52.2%	69.9%
SNHPC	**23,096**	**95,398**	**29,315**	**134,992**	**26.9%**	**41.5%**

Source: SNHPC 2000

4.8 Tax Base

The economic base of any community can be defined as all the sources from which the town receives revenue. In general, the more diverse the economic base, the lower the per capita tax burden. In New Boston, as with most surrounding towns, the primary source of revenue is property taxes, with the greatest percentage of those taxes coming from residential properties. Table 4.11 illustrates the equalized property tax rate comparison between New Boston and surrounding towns. New Boston's 2004 total tax rate was the largest out of all of its neighbors, but New Boston's equalized tax rate is the third lowest among neighboring towns.

Table 4.11
Equalized Property Tax Rate, New Boston - 2004

Municipality	Modified Local Assessed Valuation	Total Equalized Valuation Including Utilities	2004 Total Tax Rate	2004 Ratio	2004 Full Value Tax Rate	Region Rank
Amherst	1,285,202,680	1,587,194,669	$22.84	80.6	$18.33	4
Bedford	2,933,989,311	3,036,572,697	$15.74	96.6	$15.17	7
Francestown	184,243,738	210,377,787	$18.88	86.9	$16.50	5
Goffstown	1,217,573,700	1,408,119,688	$21.78	85.7	$18.74	1
Lyndeborough	125,061,930	177,133,394	$26.38	70	$18.56	3
Mont Vernon	234,780,380	234,727,966	$18.74	100	$18.68	2
New Boston	**265,046,045**	**491,630,027**	**$28.90**	**53.5**	**$15.50**	**6**
Weare	394,325,509	726,597,514	$27.60	54.1	$14.84	8

Source: NH Department of Revenue Administration, 2004 Valuation, Comparative Tax Rates & Rankings

Table 4.12
Total Local Assessed Valuation by Property Type
New Boston - 2006

Type of Property	Total Local Assessed Valuation	Percent of total
Commercial/Industrial	9,813,600	3.5%
Residential	264,715,905	95.1%
Other	3,930,318	1.4%
Total Value	278,495,823	100.0%
Residential to Commercial/Industrial Ratio: 27:1		

Source: NH Department of Revenue Administration MS-1 form for New Boston, 2006

Using the combined values for residential properties and the commercial /industrial properties, the overall percent of the total tax valuation is 95.1 percent residential and 3.5 percent commercial/industrial. This represents a ratio of 27 to 1. Although total residence values in New Boston far exceed the total of commercial/industrial values, 27:1 is not proportional with respect to achieving a balance in land use.

To better understand the relationship between the tax base and economic development, New Boston could consider conducting a cost of community services study. This study compares the costs of providing infrastructure and other public services to different types of land uses, such as commercial/industrial, residential, and open space. Cost of community services studies in other towns in New Hampshire show that commercial/industrial and open space use is a tax positive and typically residential development is a revenue negative relative to the tax base and the cost of services, namely education. Such a study could help New Boston determine the need to vary its current tax base.

4.9 Future Economic Conditions

New Boston has partnered with the Livable, Walkable Communities program of New Hampshire Celebrates Wellness to encourage pedestrianism and physical activity within the Town. One of the key principles of a Walkable Community is *having destinations to which people can walk*. This means downtown stores open at convenient hours and services (such as the Post Office, library, and Town Offices) located close to businesses. A diverse and appropriate mix of businesses located in the downtown area is the most relevant component to economic development. In Livable, Walkable communities, residents can walk to work, walk to run errands after work, and walk to common social spaces. Through the integration of specific businesses in the downtown pedestrian district, economic development can help to promote community.

Geographic location, land/building availability and zoning, home/business occupations, water and sewer coverage, and natural constraints are some of the most influential factors to New Boston's economic base.

Geographic Location: Due to its close proximity to Manchester and its relative proximity to Concord and Nashua, New Boston's location has significantly contributed to its role as a residential community. Many commuters live in New Boston and work elsewhere, which changes the economic dynamic of the town.

Land/Building Availability and Zoning: New Boston currently has a total of 610 acres of commercial and industrial zoned land. While some of this land is not developable due to wetlands, floodplains and steep slopes, there are approximately 534 acres of commercial zoned land, which could be available for future commercial development. All of the Town's current industrial zoned land (i.e. 6 acres), however, is developed.

One possible strategy for addressing this issue is to create a flexible commercial overlay district which encourages strong architectural and design performance standards. Building façade and landscaping are the most prominent components of an attractive commercial site. Additionally this district could increase zoning regulations to prevent the types of development which New Boston residents do not favor.

The availability of commercial, industrial, and office space is critical to the attraction and expansion of desirable businesses. Although no formal statistics are available, it is generally believed that there is at present very little vacant commercial, industrial or office space available for rent within the community.

Another long-term economic development strategy would be to create or permit existing office, industrial and commercial space to be used as "incubator space". Incubator space is generally small office or industrial building space that start up businesses, or expanding cottage industries, can occupy at reasonable rates. It is recommended that the town begin to make accommodations to encourage "incubator space" to further diversify the local economy, as well as encourage growth of existing cottage industries.

Home/Business Occupations: Home occupations are an important component of the local economy of New Boston. Home businesses are regulated by Article 3, Section 319 of the zoning ordinance. This ordinance states that home businesses or expanded home businesses are permitted following the established rules in terms of employees, parking, accessory structures, improvements, and noise. Non-residential site plan review is required of all regular and expanded home businesses.

Water/Sewer Coverage: New Boston has no public water or sewer system. These circumstances have hindered the development of certain types of commercial and industrial development that require water or sewer as a prerequisite to moving to a town. While New Boston may not be in a position to add water or sewer at this time, the Town should keep water and sewer potential in mind for the future. As growth occurs, New Boston might consider studies to assess the need for municipal water and sewer, particularly in the Village Center.

4.10 Regional Components Essential for Business Vitality

There are relatively few economic initiatives that are getting regional attention since most of this planning is done at the town level. Transportation is an exception, due to the Southern New Hampshire Planning Commission (SNHPC), which work with New Boston and other towns in the Southern New Hampshire region to identify traffic and transportation issues. In turn, the SNHPC works with NHDOT to prioritize these issues and to obtain funding where possible.

A number of other regional issues have been identified by the SNHPC, but there are no regionally effective organizations in place to address these concerns:

- *Affordable Housing* – SNHPC refers to this as a "regional crisis," and it can be argued that this is a crisis for most, if not all, of New Hampshire and eastern Massachusetts as well. Goffstown is making housing improvements in its downtown as a result of the Main Street USA program.

- *Labor Supply* – Although it is beyond the scope of the Town to identify the future technical skills that would most benefit New Boston and the region, this investigation could be taken up by local business organizations in cooperation with local schools.

- *Child Care* – High quality, affordable child care is an essential ingredient in the recipe for economic vitality. A Child Care Task Force should be established which may have regional implications in the availability of child care in New Boston.

4.11 Economic Development Strategies

The following techniques could assist New Boston in focusing its economic development efforts and making them compatible with the needs of the Town:

Business Incubators: A business incubator offers shared office space and business services to small start-up businesses that can help foster skilled, higher-wage jobs in areas where none currently exist. Successful models in Keene (Monadnock Regional Business Incubator Network) and in the Mount Washington Valley (Mount Washington Valley Economic Council) have helped small businesses receive the training and support they need to get off the ground.

Tax Increment Financing "TIF" Districts: Tax Increment Finance Districts can be established by towns to use revenue gained through taxation of new development to pay for public improvements within the district (RSA 162-K:9-10). The incremental taxes that result from new development, expansion, or renovation in the district can be earmarked specifically for infrastructure, parking, or other public needs. All previously existing taxes are distributed as standard (to schools, the county, and the town). TIF districts come with several restrictions, such as specifications on renovations, developments, and use of funds collected. The neighboring towns of Hooksett and Derry currently have TIF districts.

Performance Zoning: This approach to zoning is an alternative to conventional zoning approaches. As opposed to developing a prescriptive zoning scheme, which dictates permitted uses and uses by special exception, performance zoning allows a wide range of uses, provided that such uses meet environmental, aesthetic, and other performance standards. In addition to providing specific performance standards, such ordinances also include incentives for developers to build better projects. Common examples include increased density, height, setback, and other dimensional bonuses in exchange for greater landscaping; donation of off-site property for a public purpose; location of parking to side or rear of buildings; or construction of public art. Performance zoning is slowly being utilized in New Hampshire. Presently, the Town of Bedford has adopted such an ordinance and the Town of Hooksett is considering it.

4.12 Recommended Land Use Changes to Promote Economic Development

In order to increase opportunities for economic growth and to protect the rural character and natural resources of the community, the following concepts and zoning changes are recommended.

Architectural and Design Performance Standards

One of the most important issues to the residents of New Boston is the preservation of the unique rural character of the community and traditional look and feel of the Village. This issue was strongly expressed in the master plan survey as well as New Boston Speaks. While growth is the single threat to the rural character of New Boston, residents have expressed concerns that large developments could detract from the rural character of the community. The issue of aesthetic appeal and the compatibility of commercial and industrial development in relation to the town's rural character is also becoming increasingly important as the community grows. While many residents have expressed a desire for various types of services, such as restaurants/food service, small retail, medical, professional offices and personal services, the traditional styles of franchise architecture, as exhibited by Dunkin' Donuts, McDonald's, Rite Aid, CVS, etc. detract from the community. To protect the character of the community and the Village and at the same time provide opportunities for commercial growth, numerous municipalities in the state, including Concord, Bow, Goffstown and Wolfeboro for example, have adopted architectural design ordinances or guidelines to help developers plan projects so that they are more compatible with the community's character. Some of the standards typically enacted cover landscaping, building façade, signage, parking and buffering.

Building Facades

Municipalities may enact site plan regulations to ensure that development is aesthetically appealing and appropriate to the community. Scale is an important component to building design. The Planning Board could require that the vertical and horizontal scale of new and renovated buildings be in keeping with the scale of other buildings in the area.

There are two guidebooks that the Planning Board could use to begin to address this issue: *Model Non-Residential Site Plan Regulations,* June 2002 and *Non-Residential*

Development: Community Character Guidelines, August 2000. Both handbooks were prepared by the Nashua Regional Planning Commission for use by communities in New Hampshire. In addition, the Town of Bennington, VT has adopted design standards for buildings within its planned commercial district (a copy of these standards is available from SNHPC). The standards also address a variety of elements, including site planning and landscaping, building scale and massing, building height and roof design, building proportions, fenestration, materials and colors.

As demonstrated by these examples, there are numerous building façade considerations that the Planning Board could explore to enhance its site plan regulations. For example, the board could stipulate that metal siding be used only on a maximum of 20 percent of the visible exterior of the building surface. Such a requirement would encourage the use of other materials that may be more in keeping with the Village area.

The Planning Board could also adopt basic requirements related to the color of structures. As part of such a requirement, the board could mandate that subtle, neutral colors be used on larger and plain looking buildings, such as warehouse style structures, "big box retail centers", and franchise establishments. The Planning Board could also stipulate that colors that are disharmonious to other colors used on adjacent structures not be permitted. Generally, paint colors should relate to the natural material colors found on buildings, such as brick, terra cotta, stone, or ceramic tile and existing elements such as signs and awnings. Complementary colors and accent architectural details could also be required.

Scale is an important component to building design. The Planning Board could establish architectural standards in building size and building orientation so that the vertical, horizontal, or other façade characteristics of new buildings relate better to the site and other surrounding buildings.

Roof form is another important visual element and can have a significant impact on a building's form and silhouette. The Planning Board could stipulate that new roof forms relate to the roof forms of adjacent structures, where appropriate, by duplicating the shape, pitch, and materials. Unless specifically waived, the Planning Board could require that a pitched roof be provided in order to have new development better fit with the rural residential and Village character of the community.

Varied offsets, roof heights and forms, and window placement can also be incorporated into all new structures, or additions to existing structures. In terms of building design, the Planning Board could stipulate that all rooftop mechanical equipment be screened from view by either building walls or roof forms. All sides visible to the public and abutters should employ screening materials. Screening materials can also be the same material as used for the building cladding.

Landscaping, Signage and Buffering.
As with building façade, the Planning Board could consider developing more concise regulations relating to landscaping, signage and buffering. Such standards would lay out

the exact location and planting densities necessary for commercial and industrial development.

4.13 Fiscal Strategies and Resources

The following is a list of resources that could be employed by the Town of New Boston to help encourage and promote economic development.

Community Development Block Grant (CDBG) funds are a valuable resource available for funding a variety of public needs. In addition to funding affordable housing programs and community centers, CDBG funds can also be used for economic development projects. Such projects could include expansion of public water and sewer facilities or loans to help businesses or industries build or expand. In 2005, New Hampshire received a total of 10.5 million dollars in CDBG funds and through the grant process these funds were allocated to communities across the state. The total grant award to New Hampshire communities in 2006 was $3.8 million.

The Community Development Finance Authority (CDFA) was established by legislation (RSA 162-L) in 1983 to address the issues of affordable housing and economic opportunity for low and moderate- income New Hampshire residents. The Authority is both a body politic and nonprofit organization that is governed by an 11-member board of directors that are appointed by the governor for five-year terms.

By statute, the board is composed of four representatives from community development organizations, two from small business, one from organized labor, one from employment and education, two from the private financial community, and the Commissioner of the NH Department of Resources and Economic Development or his/her designee. The Authority does not receive an appropriation from the sate.

The Authority provides financial and technical assistance to community development corporations, worker cooperatives, and certain municipal entities. The Authority is unable to assist a for-profit business directly, but can work with a non-profit partner.

CDFA administers a variety of economic development grant programs, including the Economic Development Ventures Fund, Tax Credit Program, and various discretionary grants.

CDFA also administers numerous programs. One such program is the Economic Development Venture Fund. This fund is at the exclusive control of CDFA's Board of Directors who will set terms for its use and is to be used to support unique opportunities that may appear from time to time. For example, the fund may be used to cover a short-term funding gap in the event that access by a non-profit community development organization to other public funding is delayed. The fund may also be used as a source for equity investment in a cooperative venture or nonprofit business opportunity. Terms and conditions of the funding are determined on a case-by-case basis. Funding levels of the program are determined on an annual basis.

CDFA also finances major community development projects with the Community Development Investment Program. This program has proven to be a major source of support for affordable housing and economic development and is one of the most successful initiatives that CDFA has implemented. The Community Development Investment Program enables New Hampshire's businesses to donate funds or property, either in lump sum payments or pledged over a predetermined period, to fund economic development and housing projects through the state. Contributions made by these business donors entitle donors to a 75 percent state tax credit when the tax returns are filed with the New Hampshire Department of Revenue Administration. For example, a donor making a $10,000 cash donation to CDFA on behalf of an approved project will receive a tax credit for $7,500. This credit may be applied directly on a $1: $1 basis against the following state business taxes:

- Business Profits Tax imposed by RSA 77-A
- Insurance Premium Taxes imposed by RSA 400-A
- Business Enterprise Taxes imposed by RSA 77-E

Through recent legislation, CDFA's ability to issue tax credits for approved projects has been expanded. As of July 1, 1999, CDFA may accept up to $5 million in each state fiscal year in donations of cash and property for approved CDFA projects and programs. Previous tax credit commitments from the initial tax credit program (for projects before June 30, 1994) of $2 million have been made each year through June 30, 2002. Therefore, CDFA has the authority to accept $3 million in new donations for CDFA approved projects each fiscal year through June 30, 2002, and $5 million each fiscal year thereafter. CDFA charges the non-profit project sponsor a fee, typically 20 percent of the award money, for participation in the program. The fees are used to support other CDFA community development initiatives and to cover CDFA's operating costs.

5 TRANSPORTATION

5.1 Community Survey Results

In the summer of 2005, the New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left at various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The questions and responses from the survey that are related to transportation facilities and services in New Boston are summarized below.

Please rate the following:

Topic Area:	Most Important	2	3	Least Important	No Response
Road Conditions	108	**224**	109	47	15
Saft and Connected Pedestrian Walkways Throughout the Village	118	145	**149**	77	14
Parking in the Village	26	146	**211**	105	15
Controlling Traffic Congestion & Noise	150	**173**	107	55	18
Safe Pedestrian Walkways in Village	**147**	125	89	112	30
Additional Parking in Village	52	135	**161**	121	34
Enforcement of Speed Limits in Village	**143**	136	110	84	30
Less Traffic, Noise and Congestion in Village	101	118	**155**	90	39
Walking Access to Village from Outlying Areas	86	100	134	**145**	33
Stone Walls Along Public Roadways	**204**	133	92	49	25
Limiting Further Paving of Gravel Roadways	106	81	130	**136**	50
Limit Noise Pollution	**208**	145	76	42	32

How far do you travel to work?

0 miles	77
1 to 10 miles	67
10 to 25 miles	187
25 to 40 miles	64
40+ miles	41
No response	63
Not applicable	3
Retired	1

Should additional fees be required of developers to help offset the additional costs of town services and improvements such as roads?

Yes	No	No response	Maybe
436	55	11	1

The majority of respondents believed that most of the transportation questions asked in the master plan survey were important except for additional parking in the village and the need for walking access to the village from outlying areas. These questions received attention as less important. At the other end of the scale, road conditions, controlling traffic congestion and noise, safe pedestrian walkways in the village and enforcement of speed limits in the village received the highest ranking in importance. The question of less traffic, noise and congestion in the village was fairly evenly divided. In addition, it was overwhelmingly clear that a majority of respondents felt additional fees should be required of developers to help offset the costs of town services and improvements such as roads.

A town's roads and highways are a means of access to work, home, and shopping and leisure activities. They should allow the safe, convenient, and efficient movement of pedestrian, bicycle and vehicle traffic within and through the community, allowing movement between neighborhoods while discouraging through traffic on residential streets. The objectives below recognize the need for the New Boston community to develop a transportation infrastructure that is safe, convenient, accessible, and attractive to motorized AND non-motorized users alike.

Existing road characteristics and conditions have important implications for the future. Access to a particular area via the roadway network creates the potential for development. The pattern of development in a town is a reflection of the roadway network. Roadway maintenance and reconstruction expenditures usually represent a substantial item in the municipal budget. A well-planned road improvement program is essential for cost-effective and efficient management of town roads. For these reasons, the transportation chapter is an essential component of the Master Plan. This chapter describes and evaluates the existing system of roads and provides information for recommended major Town roadway improvement projects.

5.2 Goals and Objectives

Transportation Goal

To provide an adequate, scenic, and well-maintained road system that will facilitate the safe movement of pedestrians and both motorized and non-motorized vehicular traffic, and that will ensure access to existing land use as well as support the implementation of the future land use plan.

Transportation Objectives

1. To facilitate the flow of traffic on existing Town roads by minimizing and controlling the number and location of future points of road entry/driveways (curb cuts) to said roadways.

2. To encourage and facilitate safe pedestrian and bicycle movement throughout the Town.

3. To promote compatibility between future growth and land use through the development and maintenance of a safe, efficient and convenient roadway network that provides for through travel and local access and creates a hierarchy of town roads to assist in this goal.

4. To maintain and support the program and schedule of repairs, maintenance and improvements for the Town's roads and bridges which includes adequate funding for personnel, materials, and equipment.

5. To complete, update and maintain the Town's inventory, condition survey and cost analysis for all roads, through the *Road Surface Management System (RSMS), or other appropriate alternative methods.*

6. To maintain and enhance the scenic and rural character of the Town by preserving existing stonewalls along roads and perpetuating gravel surfaced roads, where appropriate.

7. To seek third-party assistance in developing a Town transportation plan that recognizes financial resources and addresses congestion, safety, village character, pedestrian, bicycle, and handicapped access.

8. To develop a Corridor Management Plan and work with State DOT and Southern New Hampshire Planning Commission to alleviate traffic congestion in the village.

Livable, Walkable Community Goal

To make New Boston a place where people of all ages and physical abilities can easily and safely enjoy walking and bicycling as forms of transportation and recreation.

Livable, Walkable Community Objectives

1. To maintain and enhance the placement of and signage for crosswalks.

2. To employ traffic calming measures including education, enforcement and engineering.

3. To increase the availability of well connected, constructed and maintained sidewalks to include winter plowing.

4. To adopt and enforce motor vehicle noise performance standards.

5. To incorporate bicycling and walking facilities into all transportation projects as required by the American Association of State Transportation and Highway Officials (AASHTO)[10] standards and the Americans with Disabilities Act (ADA)[11] standards.

6. To provide easy, safe and accessible walking and bicycling to all key destinations throughout the Town.

7. To investigate and create innovative alternative parking options.

8. To improve nighttime lighting for easy and safe walking and bicycling while limiting or prohibiting light pollution as prescribed by the International Dark-Sky Association.[12]

9. To explore alternative routes across Town without accessing the town center.

10. To develop a contiguous walking, bicycling and recreational trail system throughout the Town.

5.3 Land Use, Transportation and Sprawl

Land use directly influences transportation and transportation directly affects land use. There is little doubt that this relationship exists and that better land use and transportation planning can help communities avoid creating inefficient and expensive land use patterns and transportation systems.

The best place for planning and coordinating land use and transportation is at the local level where the majority of land use decisions are made. However, this must be carefully approached. While better land use planning can reduce the need for new roadways, and can make existing roadway infrastructure safer and more efficient, poor land use and transportation decisions can also contribute to and result in "sprawl" -- the spreading out of people and buildings across the landscape with little or few mobility options available, except by the automobile.

[10] Visit http://transportation1.org/aashtonew/ for more information.
[11] Visit http://www.usdoj.gov/crt/ada/adahom1.htm for more information.
[12] Visit http://www.darksky.org/ordsregs/odl-regs.html for more information.

Sprawl consumes land and results in the loss of valuable open space and woodlands creating environments that are less attractive to business and visitors. Sprawl also reduces the forests and farmlands on which many in this state depend for jobs and income.[13] Sprawl can take many forms. It can occur as widely scattered residential lots in outlying areas or as densely populated subdivisions with wide streets in suburban locations. It also can occur as a commercial strip along major connecting roadways and in new commercial and industrial areas that have been developed away from town centers and residential neighborhoods.[14]

How can land use and transportation planning work together to prevent or reduce sprawl, provide opportunities for mobility and at the same time maintain the rural character that the majority of people of New Boston desire? Certainly the goals and objectives in this chapter will help. But land use and transportation is a complicated issue. It is easy to think about transportation only when it is a problem – when stuck in traffic, when the bus is late, when a street or bridge is shut down for reconstruction or when it is not possible to walk to the corner store. Yet no one wants less mobility. On the contrary everyone wants more. Therefore, it is important that transportation be thought of and planned as a community asset and a necessary public responsibility.

There are other challenges in transportation as well. Meeting the needs of people for access and mobility is just as important as the need to move cars and trucks. This means equal attention is needed to both building roads and planning for the transportation improvements that will best serve the community. This distinction is important as New Boston moves forward in meeting its transportation goals and objectives.

5.4 Land Use and Trip Generation

There is little doubt that demand for travel will continue to grow in New Boston and New Hampshire in the years to come. As land is developed the number of new trips generated on local and state roads will continue to increase. The Institute of Transportation Engineers (ITE) publishes trip generation rates based upon actual survey data of known land use activities across the country. These trip generation rates are used to help predict travel behavior and project future travel demand and distribution. According to ITE data, a new single-family dwelling (ITE Code 210 – Single-Family Detached Housing) generates approximately ten vehicle trips per day while a facility such as a large retail superstore (ITE Code 813 – Free-Standing Discount Superstore) generates approximately 49 trips per day per 1,000 square feet of gross floor space[15]. Assuming this trip generation rate, a retail superstore of approximately 100,000 square feet would generate approximately 4,900 trips per day.

It is important that as new development proposals are presented to the Planning Board, an accurate evaluation of the potential number of trips is determined and an assessment

[13] A Handbook on Sprawl and Smart Growth Choices for Southern New Hampshire Communities, Southern New Hampshire Planning Commission, 2002.
[14] From Exploring Sprawl #2: What is Sprawl in Vermont? VT Forum on Sprawl, Burlington, VT.
[15] Institute of Transportation Engineers, *Trip Generation, 7th Edition*, Washington, D.C., 2003.

occurs regarding what impact this increased traffic will have on the Town's road, pedestrian and bicycle network. Not all development proposals need to provide traffic impact studies; however, it should be a policy of the Town to ensure that new development does not diminish the safety or the capacity of existing town streets, bridges and intersections.

This can easily be addressed as part of the Town's Non-Residential Site Plan Review Regulations by requiring as part of the plan review process that any commercial, office or industrial project exceeding a certain number of trips per day (for example 50 or more) or residential projects (such as 15 or more dwelling units as determined by the most recently published version of ITE's Trip Generation Manual) submit a traffic impact study demonstrating that their project will not diminish the capacity or safety of existing Town streets, bridges, intersections sidewalks and/or bicycle and footpaths. If a technical study is required, it should be conducted at the applicant's expense.

If it is determined that improvements to roadways, bridges, traffic signals, or intersections are required for a proposed development to avoid diminishing the existing capacity or safety of these public systems, those improvements should be made as part of the development, at the developer's expense.

Currently, there is no **mandatory** requirement for the submittal of a traffic impact study in the Town's Non-Residential Site Plan Review Regulations. This is left to the discretion of the Planning Board based upon the size, location or traffic-generating characteristics of the development.

5.5 Highway Classification

Roads and highways are identified according to an administrative classification system and a functional classification system. The administrative classification system, as presented in RSA 229:5 of the New Hampshire State Statutes, defines governmental responsibilities for construction and maintenance purposes. A functional classification system is based on the role of a given road in terms of the amount of traffic it carries and the type of area it serves.

5.1.1 Administrative Classification

Highways under state maintenance and control include Class I, II, and III highways. Class IV, V and VI highways are under the jurisdiction of municipalities. The descriptions below detail the differences between administrative classes.

- Class I highways consist of all existing or proposed highways which are part of the primary state highway system excepting all portions of such highways within the compact sections of 27 towns and cities listed in RSA 229:5, V.

- Class II highways consist of all existing or proposed highways on the secondary state highway system, except those portions of such highways which are within the compact sections of 27 towns and cities listed in RSA 229:5, V.

- Class III, Recreational Roads, consist of all roads leading to, and within, state reservations designated by the legislature.

- Class III-a, highways consist of new boating access highways from any existing highway to any public water in the state.

- Class IV, Town and City Streets, consist of all highways within the compact sections of 27 towns and cities listed in RSA 229:5, V. The extensions of Class I and Class II highways through these areas are included in this classification.

- Class V, Town Roads, consist of all other traveled highways which the town has the duty to maintain regularly.

- Class VI, Unmaintained Highways, consist of all other public ways, including highways discontinued as open highways, highways closed subject to gates and bars, and those highways, which have not been maintained in suitable condition for travel for a period of five years or more.

- Scenic Roads are special town designations (by vote of the Town meeting) of any road, other than a Class I or Class II highway, where the repair, maintenance, reconstruction, or paving work shall not involve or include the cutting or removal of trees, or the destruction of stone walls, except as provided for under RSA 231:158.

Map 5 on the following page identifies the roadway network in the Town of New Boston, including designated scenic roads. Following this is the "Administrative Highway Classification" map (Map 6), which identifies the Class I, Class II, Class V, and Class VI roads in the Town of New Boston. There are no Class III or Class IV highways in New Boston.

Insert Map 5 and 6 here

According to the NH DOT's statewide road inventory, there are approximately 15.8 miles of Class VI roads in New Boston. The only Class I road in New Boston is a portion of Route 114 approximately 1.1 miles in length. Class II roads, comprising about 17.7 miles of New Boston's road system, include Route 13, Route 136, Route 77, and Chestnut Hill Road. The majority of the town's roads (approximately 85.1 miles) are Class V roads. According to the Town Road Agent, there are approximately 40 miles of unpaved road in the Town of New Boston (see Map 5 which shows their location). These unpaved roads include both Class V and Class VI roads.

Typically it is less expensive for most municipalities to maintain paved roads, excluding the cost of drainage. However, paving a gravel road for the first time is not cheap, but as traffic counts increase maintaining a gravel road also becomes expensive.

The UNH T^2 Center, *Road Business,* Spring 2006, Vol. 21, No. 1 newsletter indicates that there are increased costs required to maintain gravel roads as the average annual daily traffic (AADT) increases. Basically, the costs of bituminous and gravel maintenance are similar when the AADT reaches 150 to 199. The UNH T^2 Center advises local officials to consider developing their own cost estimates for gravel road maintenance operations and to check the cost against their own historical records.

According to NH DOT's statewide road inventory, there is also a total of approximately 15.8 miles of unpaved Class VI roads in town. These figures are summarized in Table 5.1 below.

Table 5.1
Highway Mileage
New Boston
(Mileage is approximate)

Highway Classification	Mileage
Class I	1.1 miles
Class II	17.7 miles
Class V	85.1 miles
Class VI	15.8 miles
Unpaved Roads	40 miles

Source: NH DOT

Table 5.2 on the following page compares the mileage of Class VI roadways in New Boston with data from other similarly sized towns within the SNHPC region. As shown in this table, as of 2003, New Boston had more mileage of Class VI roadways than any other town within the region, including the towns of Chester, Candia and Deerfield.

Table 5.2
Class VI Roadway Mileage
For Selected Towns in the
SNHPC Region

Town	Class VI Roadway Mileage*	Population**
New Boston	15.8	4140
Chester	9.1	3790
Candia	10.8	3910
Deerfield	10.6	3680

* - NHDOT (2003)
** - 2000 US Census, SF-1, P01

5.5.1 Functional Classification

The functional highway classification system, utilized for transportation planning purposes, classifies roads according to the various functions they perform. Highway systems have two purposes -- to provide mobility and to provide access.

Where the highway's primary function is to provide mobility, relatively high and preferably sustained speeds are desirable. In contrast, low speeds are necessary where the highway's function is to provide safe access to and egress from abutting land uses. In between these extremes are other highways, which have a dual function of having to provide both mobility and access. Travel speeds may be somewhat higher on these roads than on those which primarily serve an access function, but rarely as high as on roads whose primary function is to provide mobility. The Town's existing functional highway classification system, presented in Map 7 on the following page classifies the Town's roadways into minor arterials, major collectors and minor collectors.

In consideration of the future growth demands on New Boston's system of roads and highways, the Road Agent, in conjunction with the Town Road Committee, has developed a new functional classification system for the Town road network. This functional classification system, along with new related road design standards, is currently being developed by the Road Agent and the Town Road Committee. It is anticipated that these new standards will be forwarded to the Town Planning Board in the near future. The proposed new functional classification system is described as follows:

- Primary Roads (Arterials): Roads in this category will include roads having an average daily traffic (ADT) count of 1000 vehicles per day (vpd) or more. The primary function of these roads is to carry inter-community and through traffic, and to connect secondary roads in the system.

- Secondary Roads (Major Collectors): Roads in this category will include roads having an ADT count between 400 and 1000 vpd. The primary function of these roads is to provide access to the various sections of the community from the

Insert map 7 here

- primary roadways. These roads will collect traffic from local and subdivision roads and connect with primary roads in the town.

- Tertiary Roads (Local/Subdivision Roads): Roads in this category will include roads having an ADT of 400 vpd or less. The primary function of these roads is to provide for vehicular and pedestrian movement in and around the residential and service areas of the community. These roads are to be developed to maintain the rural character of the community while functioning as safe travelways for residents.

Additional information on the Town of New Boston's proposed functional classification system and proposed road design standards are included as Appendix B. The materials outline minimum design standards for new construction and rehabilitation of existing roadways under the defined functional classifications. Roadways designated as scenic roads by the Town are shown on Map 5.

5.6 Roadway Evaluation

Priorities for roadway improvement projects for the near future include pavement overlays for existing paved roads and reclamation projects designed to ensure that all Town roads are repaved regularly. An additional priority roadway project involves paving of selected existing gravel roads in the Town. Additional individual roadway maintenance projects include improvements to Bedford Road and replacement of bridges on Gregg Mill Road and Hilldale Lane. Replacement of the Lyndeborough Road bridge over the South Branch of the Piscataquog River is a State-funded project included in the Ten-Year Transportation Improvement Plan 2007-2016. The Bedford Road project will likely be funded through a combination of existing reserves and State Block Grant funding. Funding arrangements for the Gregg Mill Road project and the Town's portion of the Lyndeborough Road project are currently underway. A list provided by the Town's Road Agent of Road Improvement Projects is provided below (this list is not in order of priority):

- Lyndeborough Road Bridge
- Gregg Mill Bridge
- Hilldale Lane Bridge
- Replace large culvert Bog Brook Road
- Replace 2-3' culverts on Bedford Road
- Reclaim section of Bedford Road from the intersection of Christie Road to Chestnut Hill Road
- Upgrade Beard Road (from gravel to pavement)
- Upgrade Riverdale Road from Gregg Mill Road to Parker Road and pave
- Improve intersections at Old Coach Road and Route 13
- Catch up on resurfacing program

It is recommended that the Town of New Boston compile a complete list of town roads with a timetable for improvements for use in the Town's Capital Improvement Program (CIP).

5.7 Highway Accidents

Crash data was obtained from the New Hampshire Department of Transportation (NH DOT) and the New Boston Police Department for the period from 1994 to 2004. During this period, there were a total of 806 accidents in the Town, with a high of 106 accidents occurring in 2002 and a low of 48 accidents occurring in 1994. A summary of the annual accident total is presented in Table 5.3 below.

Table 5.3
Accident History in
New Boston, 1994 - 2004

Year	Total Number of Accidents Reported
2004	79*
2003	90
2002	106
2001	77
2000	61
1999	68
1998	52
1997	91
1996	78
1995	56
1994	48

* Source: New Boston Police Department
Source: State of NH

Crash data for the period 2000 to 2004 was used to identify high accident locations within the Town. High accident locations at intersections and at roadway link locations between intersections were identified. A listing of the high accident locations in the town is presented in the following Table 5.4. This table shows that for the period from 2000 to 2004, the NH 13 (River Road)/Howe Bridge Road intersection experienced the greatest number of accidents. A total of seven accidents occurred at this location during this period.

Table 5.4
High Accident Intersections in
New Boston, 2000 - 2004

Intersection	2000	2001	2002	2003	2004	Total
River Rd (NH 13) at Howe Bridge Rd	0	0	4	2	1	7
Mont Vernon Rd at Old Coach Rd	0	1	2	1	2	6
Mast Rd (NH 114) at Whipplewill Rd	0	0	2	3	0	5
Joe English Rd at Meadow Rd	0	3	0	2	0	5
Mont Vernon Rd (NH 13) at Meadow Rd	1	0	2	1	0	4
Bedford Rd at Arrowwood Rd	3	0	0	0	1	4

Source: State of New Hampshire and Town of New Boston Police Department

Table 5.5 presents the high accident mid-block locations (non-intersections) in the Town from 2000 to 2004. The results of the evaluation indicate that the portion of NH 13 (Mont Vernon Road) between Meadow Road and the Mont Vernon town line experienced the greatest number of accidents. During this period, a total of 13 accidents occurred at this location.

Table 5.5
High Accident Mid-Block Locations in
New Boston, 2000 - 2004

Roadway Segment	2000	2001	2002	2003	2004	Total
Mont Vernon Rd (NH 13) between Meadow Rd & Mont Vernon T/L	5	2	3	3	0	13
NH 114 between Weare T/L and Goffstown T/L	1	2	4	0	2	9
Bedford Rd between Molly Stark Lane and Old County Rd	1	1	5	2	0	9
NH 13 between Byam Rd and Howe Bridge Rd	3	2	3	0	0	8
Old Coach Rd between Cochran Hill Rd and NH 13	0	1	4	2	0	7
Bunker Hill Rd between NH 136 and Saunders Hill Rd	1	2	0	1	2	6
NH 13 between Howe Bridge Rd and Goffstown T/L	1	3	1	1	0	6
Francestown Rd (NH 136) between Thornton Rd & Francestown T/L	0	3	2	0	0	5
Twin Bridge Rd between NH 77 and Weare T/L	0	1	2	1	1	5
Bedford Rd between Campbell Pond Rd and Chestnut Hill Rd	1	2	1	1	0	5

Source: State of New Hampshire and New Boston Police Department

Table 5.6 on the following page identifies fatal accident locations in New Boston. This table indicates that a total of five fatal accidents occurred in the Town during the period from 1994 to 2004. Three of the fatal accidents occurred on NH 13 and an additional fatal accident occurred on NH 114. The other fatal accident occurred on Bedford Road.

Table 5.6
Fatal Accident Locations in
New Boston, 1994 - 2004

Year	Number of Fatalities	Location
2003	1	Bedford Road, 3168' South of Foxberry Drive
1999	1	NH 13, 1 Mile from the Goffstown Town Line
1997	1	NH 13, between Meadow Rd and Hooper Hill Rd
1994	1	NH 13, between Howe Bridge Road and Goffstown Town Line
1994	1	NH 114 at Whipplewill Road

Source: State of New Hampshire

5.8 Traffic Operations and Pedestrian Improvements

In order to assess existing and future traffic conditions in the Town, 2004 estimated daily traffic volumes and 2025 projected daily traffic volumes were developed for selected locations of the Town's roadway system. The 2004 estimated daily traffic volumes and 2025 projected daily traffic volumes were produced from the regional traffic count database and from growth rates assumed from the regional demand estimation model operated and maintained by the SNHPC. The 2004 estimated annual average daily traffic volumes (AADT) and the 2025 projected annual average daily traffic volumes are shown in the Table 5.7 and on Map 8 on the following pages.

Table 5.7
2004 Estimated & 2025 Projected
Annual Average Daily Traffic Volumes (AADT), New Boston

Description	2004 Projected Volume	2025 Projected Volume
NH 13 at Mont Vernon town line (TL)	3,200	4,330
Chestnut Hill Rd at Amherst TL	690	940
NH 13 west of Gregg Mill Rd	3,700	6,500
NH 13 over Piscataquog R. south of town	3,000	4,500
NH 13 over Piscataquog R. in town	6,500	10,000
Old Coach Rd east of Town Farm Rd	1,000	1,600
Francestown Tpk at Lyndeborough TL	1,100	1,500
Bedford Rd east of Wilson Hill Rd	1,700	2,800
Clark Hill Rd. at Francestown TL	40	60
Lyndeborough Rd over Piscataquog R.	540	720
Joe English Rd at Mont Vernon TL	140	200
Middle Branch Rd west of NH 77	210	300
McCurdy Rd east of Old County Rd	570	670
Bunker Hill Rd north of NH 136	180	260
NH 136 east of Pine Echo Rd	2,500	3,500
NH 136 at Francestown TL	1,600	2,200
NH 77 south of Twin Bridge Rd	2,500	3,800
Gregg Mill Rd south of Riverdale Rd	570	890

Source: Southern New Hampshire Planning Commission

Insert Map 8 here

The following section provides information on three intersections identified as problem locations by the Town. Specific operational and/or safety issues are identified at each location and recommendations designed to address these issues are also included.

5.9 Hilldale Lane over Piscataquog River

The existing bridge carrying Hilldale Lane over the Piscataquog River is located in the central portion of the Town just north of the Village. The existing structure consists of a single 49-foot span formed from steel girders and a corrugated steel deck supported by stone abutments. The bridge roadway is 16 feet wide. The structure is generally in satisfactory condition but the guardrails and approach rails are considered to be substandard and the bridge is listed by the NHDOT as functionally obsolete. The existing Hilldale Lane approach to the bridge from NH 13 is lower than the bridge itself, while the approach to the bridge from the opposite end is relatively level with the structure.

Hilldale Lane Bridge

The Town contracted with a consultant in 2005 to study alternatives for rehabilitation/ replacement of the existing structure. The following alternatives were included in the consultant's assessment:

- Placement of a new superstructure on the existing bridge abutments
- Replacing the entire bridge superstructure and abutments

Replacement of the existing bridge superstructure, the most inexpensive option for upgrading the facility, would improve the physical condition of the bridge but would not necessarily result in the widening of the structure. Replacement of the entire superstructure and abutments would make it possible to widen the bridge to accommodate two-way vehicular traffic. Either option may also involve additional work to the roadway approaches to the bridge. Additional issues to be considered in the choice

of an improvement option include accommodating pedestrian and bicycle traffic, traffic control during construction and environmental permitting.

5.10 Bedford Road/Wilson Hill Road Intersection

The Bedford Road/Wilson Hill Road intersection is a three-way unsignalized intersection located in the eastern portion of the Town. Bedford Road, which acts as the major intersection roadway, runs in an east-west orientation from the Town Center to Chestnut Hill Road and into Bedford. Wilson Hill Road, which runs in a north-south orientation from NH 13 and intersects with Byam Road forms the minor STOP-sign controlled leg of the intersection. Motorists cannot get from Rt. 13 using Wilson Hill Road, but instead must use Byam Road and then hook to Wilson Hill Road. Speed limits on Bedford Road in the vicinity of the intersection are posted at 35 miles per hour.

Looking East on Bedford Road from Wilson Hill Road

Bedford Road east of Wilson Road, experiences many turns and changes in vertical elevation. These elevation changes combine with vegetation and a slope/stone wall running along the north side of the roadway to limit sight distance at the Bedford Road/Wilson Hill Road intersection. Based on an engineering investigation of the intersection conducted for the Town in 2005, there is currently 160 feet of available sight distance looking east on Bedford Road from the Bedford Road/Wilson Hill Road intersection. A minimum of 390 feet of sight distance is required for the posted speed of 35 miles per hour on Bedford Road.

Recommendations for addressing deficiencies at this intersection would include cutting back vegetation and the slope/stone wall east of Wilson Hill Road. Based on an inspection of the intersection conducted by the SNHPC in January 2006, a STOP line should also be installed on the Wilson Hill Road approach. The advantages of any proposal to modify the existing stone wall east of the intersection should be considered

against the Town's objective to maintain and enhance the scenic and rural character of the Town by preserving these stone walls.

5.11 New Boston Village

New Boston Village, located at the NH 13 bridge crossing of the Piscataquog River, is characterized by a mix of residential, commercial and institutional land uses. The major Village intersections, adjacent to the eastern and western ends of the bridge, are the most heavily traveled locations in the Town. In 2004, the estimated average annual daily traffic (AADT) volume on the bridge was 6,500.

The NH 13/Meetinghouse Hill Road/Mill Street intersection, located adjacent to the eastern end of the bridge, provides access to the Town Hall and the Town Common. It operates as a three-way STOP-controlled intersection with the Meetinghouse Hill Road, Mill Street and southbound NH 13 (River Road) approaches acting as STOP-sign controlled minor intersection legs. The northbound NH 13 approach acts as the major intersection leg. There is a traffic signal beacon installed at this intersection.

The NH 13/NH 136/NH 77/Clark Hill Road intersection is located adjacent to the western end of the bridge. It operates as a four-way unsignalized intersection with the southbound NH 136/NH 77 and northbound NH 13 approaches acting as the major intersection legs and the westbound NH 13 and eastbound Clark Hill Road approaches acting as STOP-sign controlled minor intersection legs. The three-way NH 13/Old Coach Road unsignalized intersection is located just south of this location, and the three-way NH 13/Maple Street unsignalized intersection is located between the NH 13/NH 136/NH 77/Clark Hill Road intersection and the bridge.

In 1987, SNHPC conducted an engineering investigation of the Village area to identify improvement options designed to address traffic issues such as mixing of through traffic and local trips on NH 13, sight distance limitations, poor traffic circulation patterns and the need for additional traffic control, including crosswalks. The list below provides details concerning these and other traffic issues within the Village area. Recommended short-term and long-term improvements and suggestions for crosswalk locations are shown on the following Map 9.

Short-Term Improvements

1. The existing parking design on Clark Hill Road west of the NH 13/Clark Hill Road intersection should be modified to address safety concerns. Vehicles exiting from these parking spaces are presently required to back into traffic on Clark Hill Road.

2. Modifications to the existing traffic circulation pattern around the traffic island at the NH 13/NH 136/NH 77/Clark Hill Road intersection are required to address issues of traffic safety and efficiency. The existing intersection design and two-way traffic pattern on the north side of the island creates hazards and confusion for motorists.

Insert Map 9 here

NH 13/NH 136/NH 77 Intersection

3. The excessive width of the Maple Street approach to the NH 13/Maple Street intersection results in safety issues because it does not adequately delineate lanes of travel. Re-design of the intersection is required to adequately define the intersection approach.

NH 13/Maple Street Intersection

4. Modifications to the existing traffic signal beacon at the NH 13/Meetinghouse Hill Road/Mill Street intersection are required to address issues of traffic efficiency and safety. The beacon should be modified to provide a separate appropriately-positioned signal for each approach of the intersection.

5. Pedestrian crosswalks in the Village are faded and should be restriped to encourage safe and efficient foot travel. Before this work is undertaken, the location of all crosswalks in the Village should be reviewed and coordinated with the on-going New Boston Liveable, Walkable Communities Project.

Long-Term Improvements

1. An access management program for the Village, incorporating re-design of existing parking areas and curb cuts is required to address issues of traffic safety and efficiency. Specific issues regarding access management include the design of parking, location of curb cuts and sight distances in the vicinity of the NH 13/Meetinghouse Road/Mill Street intersection near the General Store and sight distances and the location of curb cuts near the bank adjacent to the NH 13/NH 136/NH 77/Clark Hill Road intersection.

Sight distances limited by existing parking – village center

2. Sight distance improvements are required at the NH 13/Old Coach Road and NH 13/NH 136/NH 77/Clark Hill Road intersections to address safety issues. Potential solutions to the sight distance deficiencies at these locations may involve issues of right-of-way.

Sight distances limited by existing terrain – NH 13/Old Coach Road intersection

3. Long-term solutions to the existing NH 13 Piscataquog River bridge in the Village, such as replacement of the bridge, are required to address issues of traffic efficiency and safety related to long-term development and traffic growth in the Town.

The Transportation Improvement Program (TIP) represents a vital link between plan development and the implementation of transportation projects. The SNHPC, on behalf of the Town of New Boston and its other member communities, is required to participate in the TIP process of project implementation that includes updating the document biannually. The TIP process begins during the Fall of even-numbered years with input from the local communities as they submit their priorities for transportation system projects. The projects are reviewed and ranked and a recommended list of projects is forwarded to the NHDOT for consideration.

The current FY 2005-2007 SNHPC TIP does not contain any improvements projects located in the Town of New Boston. The NHDOT Ten Year Transportation Improvement Plan 2007-2016 includes one project in the Town. This project, mentioned earlier in this chapter, involves the replacement of the bridge carrying Lyndeborough Road over the South Branch of the Piscataquog River. The NHDOT Ten Year Transportation Improvement Plan 2007-2016 also documents three additional bridges in the Town, two of which, Hilldale Lane and Gregg Mill Road, have been discussed earlier in this chapter:

- NH 13 over Piscataquog River – this is a State "red-listed" bridge. The State is responsible for this structure and intends to have it included in the Ten-Year Transportation Improvement Plan 2007-2016.
- Hilldale Lane over Piscataquog River – this is a municipally-owned bridge classified by the NHDOT as functionally obsolete
- Gregg Mill Road over Piscataquog River - this is a municipally-owned bridge classified as structurally deficient/functionally obsolete

Bridges are included in the State's "red-list" because they require more frequent inspection due to known deficiencies such as poor structural conditions, weight restrictions or type of construction. The NHDOT Ten Year Transportation Improvement Plan 2007-2016 also documents municipally-owned bridges with similar deficiencies.

5.12 Livable, Walkable Communities

Pedestrian and bicycling access issues have grown in importance throughout the 1990s and into the 21st century. Communities are beginning to recognize the positive impact of providing easy and safe pedestrian and bicycle facilities. These impacts include an improvement in a community's economy, environmental health, social capital and the overall health of the community's residents. The U.S. Congress and State legislatures have made it considerably easier in recent years to fund non-motorized projects and programs; a number of laws and regulations now mandate certain planning activities and design standards to guarantee the inclusion of pedestrians and bicyclists. Despite these changes, levels of bicycling and walking remain frustratingly low due to barriers imposed

while focusing solely on motorized transportation, and most communities continue to grow in ways that make travel by means other than private automobiles quite challenging.

New Boston is no different in this respect from other communities across the country. There are few sidewalks and all are poorly maintained. There are several dangerous intersections; limited parking; no walking or bicycle paths; excessive noise and speed from motor vehicles including cars, trucks and motorcycles; and no continuous walkways or paths for children to walk to and from school safely. The result is a town center that is often congested and unsafe for pedestrian, bicycle and vehicle traffic.

These problems are complicated by the fact that there are few alternative roads to travel across town. Most residents go through the town center to get from one side of town to the other. NH Routes 13, 136 and 77 all pass through the center of town. The main route to Manchester, used by New Boston and Francestown residents, also feeds into the village. These roads, along with several others, are the spokes of a wheel that all converge in the village center. The 2004 estimated average annual daily traffic on NH 13 through the center of town was 6500 vpd. The 2025 projected volume is 10,000 vpd; a 53.8 percent increase (refer to Table 5.7). Residents must be alert to walk or bicycle in the village during peak vehicle periods. Children walking to and from school are especially vulnerable.

Until the last building cycle in the mid-90s, most residents within a mile of town could walk or bicycle safely along all the roads leading to the village. But in the last ten years, traffic has increased significantly. Vehicles have become wider while shoulder widths, amount of sidewalk, and the number of crosswalks have not kept pace. River valley topography contributes to the existing barriers.

Six roads connect residents from outlying areas with the New Boston center; three are town-owned roads and three are state-owned. The three town roads are 22 feet wide, have no sidewalks, have narrow or non-existent shoulders, steep grades, and blind turns within 500 feet of the town center. The three state roads are also 22 feet wide and lack shoulders in many key places where the terrain is steep on both sides. This situation occurs in a number of places within a quarter mile of the town center including along NH 13 connecting key destinations such as the school, Town Hall, and bank with the post office. Where a footpath over conservation land might be a good alternative to connect businesses and residential areas of Town, the river requires bridging. To address some of these barriers along roads and over the river, town, state and environmental officials must coordinate.

There is a need to evaluate many of the existing roads and streets in town for bicycle safety. NH 13 (River Road) for example has poor bicycle safety and is in need of shoulders and signage. There may be other roads in New Boston as well that are in need of similar bicycle safety accommodations. To address this need, it is recommended that the Town consider the development of a bicycle and pedestrian pathways master plan for New Boston. This plan could then be used as a basis for identifying existing bicycle

safety issues and in developing a list of recommended improvements and potential future projects.

These are not insurmountable barriers. In 2005 New Boston's Foot Traffic and Road Safety Committee submitted an application for a Transportation Enhancement (TE) grant for the Millpond Footbridge project. The TE program, included in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation, is designed to develop and reinforce "liveable communities" by funding projects that preserve the historic culture of the transportation system and enhance the operation of the system for its users. The Millpond Footbridge project will enable the Town, by providing a continuous walkway from the Town center to the south village, to relieve traffic congestion by offering an alternative mode of transportation.

Other federal funds are available to address these barriers. The Federal Highway Administration is working with professional groups to recommend policies and standards that might achieve the overall goal of fully integrating pedestrians and bicyclists in the transportation system.

Federal funding for bicycle safety improvements and non-motorized trail development is available under the current SAFETEA-LU legislation through NH DOT's Transportation Enhancement (TE) and Congestion Mitigation and Air Quality programs. The SNHPC is available to provide further information about these programs and funding sources and can provide direction to the Town of New Boston about the feasibility and development of future projects.

In addition to bicycle and pedestrian safety and recreational trail development, there are also noise and safety issues related to increasing noise and acceleration of truck traffic in the downtown area. While this is mainly a local speed enforcement issue, there is a possibility that it could be addressed by identifying and implementing alternative truck routes through town. According to information received from the NHDOT, there is no formal procedure for designating truck routes through towns. There are generally no restrictions on State highways for truck travel. Municipal officials could develop an alternative truck route through the Town and approach the NHDOT district office with a specific proposal for an alternative route. In order to be considered, the proposal would need to accommodate heavy vehicle traffic with the same service level and provide a similar level of network accessibility as the existing route.

In addition to this possibility, the District 5 office of the NHDOT was contacted regarding excessive speeds on NH 13 entering the Town Village area. The measures suggested by the NHDOT to address excessive speeds included increased enforcement and improved signage. However, based on the existing roadway geometry and current traffic conditions on this portion of NH 13, it is unlikely that a reduction of the existing posted speed limit of 30 miles per hour would be considered as mitigation for excessive speeds.

There is also another possibility available to consider and address the Town's problems of pedestrian safety and traffic speed. This is referred to as the Context Sensitive Solutions (CSS) planning approach. CSS is defined by NH DOT as a "collaborative, interdisciplinary approach, that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources while maintaining safety and mobility." It is recommended that the Town of New Boston work with the Southern New Hampshire Planning Commission to seek the development and implementation of a CSS pilot project through NH DOT for New Boston.

5.13 Future Implications

Overall although growth in traffic can be expected to occur on the collector and arterial roadway network in the town, a significant portion of traffic growth is attributable to increases in through trips and region-wide tripmaking. As a result, there is little that the town can do to reduce this traffic. However, a safe and efficient transportation system can be developed and maintained through emphasis on multi-modal transportation and regard for access management. Through the subdivision and site plan review processes, the town can plan for and create improved accessibility while maintaining efficiency and safety.

With the majority of development expected to be in the form of residential activity, it is through these processes that the town can strive to 1) minimize or mitigate potentially adverse impacts of traffic on NH 13, 77, 114, and 136 and 2) implement a well-conceived local road system. The following guidelines apply to the existing arterial and collector systems:

1. MINIMIZE THE NUMBER OF NEW STREETS AND DRIVEWAYS INTERSECTING WITH STATE AND LOCAL HIGHWAYS AND ROADWAYS. Fewer and better-designed access locations are preferable. Developers should be encouraged to consider access management through coordination with State and local officials.

2. OPTIMIZE THE LOCATION OF FUTURE STREET INTERSECTIONS AND DRIVEWAYS by considering available sight distances, and spacing between and proximity of other entrances, and geometric design improvements.

3. THE PROPER DESIGN OF NEW ACCESS POINTS should be based on existing and future traffic as well as the composition of traffic and existing site parameters.

To help achieve the establishment of a safe and efficient local road system through the development of future subdivisions, the following principles should be considered:

1. ADEQUATE VEHICULAR AND PEDESTRIAN ACCESS SHOULD BE PROVIDED TO ALL PARCELS. This includes the provision of deeded rights-

of-way designed and located to provide logical extensions of subdivision roads for future development.

2. DISCOURAGE THROUGH TRAFFIC IN ESTABLISHED RESIDENTIAL NEIGHBORHOODS. Typical residential neighborhood traffic volumes range between 100 and 1,500 vehicle trips per day. Road patterns which encourage through traffic to enter residential neighborhoods can promote higher volumes, which will have a tendency to increase over time.

3. THE STREET PATTERN SHOULD MINIMIZE EXCESSIVE TRAVEL. Convenience and safety considerations should not be overlooked. Emergency response should not be delayed by unnecessarily circuitous street patterns.

4. LOCAL STREETS SHOULD BE DESIGNED TO DISCOURAGE EXCESSIVE SPEEDS. THIS CAN BE ACCOMPLISHED THROUGH PEDESTRIAN SAFETY AND TRAFFIC CALMING TECHNIQUES.

5. THE NUMBER OF INTERSECTIONS WITHIN THE OVERALL LOCAL STREET SYSTEM SHOULD BE MINIMIZED. In the case of subdivision streets, two "T" intersections with proper offsets are generally preferable to a single four-way intersection.

6. ADEQUATE SIGHT DISTANCE SHOULD BE DESIGNED INTO AND MAINTAINED AT ALL STREET INTERSECTIONS.

Through proper roadway maintenance and access management planning, the existing state roadway system in New Boston is presumed to be capable of meeting the foreseeable transportation demands without major modification.

With a properly designed and well-conceived expansion of the local road system as overseen by the Planning Board, New Boston will be in a better position to absorb the anticipated growth in development without creating major deficiencies in its circulation system.

5.14 Conclusion

Addressing traffic congestion by increasing road capacity alone is an expensive solution and often just a temporary fix. The expense of right-of-way, road construction and maintenance is a difficult and ongoing issue. While some selected highway and capacity improvements will be necessary in the future; it is clear that building and improving more roads is not the answer to New Boston's transportation future.

Given the lack of funding and resources for transportation, New Boston like most other similar communities in New Hampshire has been forced to choose between either:

1) Keeping its present roads safe accepting some level of congestion, or

2) Addressing congestion at the expense of more system maintenance and construction needs.

Neither of these approaches offers the most effective solution. Effective management of transportation in New Boston will require careful planning, funding and a unique set of partnerships at almost every level: across state agencies, between state, regional and local governments, and public-private partnerships. It will also require an updated transportation plan that provides a vision of the future of the community as growth occurs; a Capital Improvement Program (CIP) that is updated every year and sets forth the location and schedule of infrastructure improvements, including bicycle, pedestrian and transit needs; effective land use regulations to ensure that new developments and buildings are designed to fit within the character and landscape of the town by improving connections between various modes of travel, including rail, transit, walking and bicycling. Also important is limiting access points and combining driveways so that existing roads can operate more safely and carry more traffic without additional widening.

There are a number of other transportation and land use planning guidelines that New Boston can consider as well. Many of these recommendations were recently put forth in the NH DOT's *New Hampshire Transportation Business Plan Findings and Recommendations, February 2006, Revised* report and are identified here as follows:

1. Common Sense Should Drive Transportation Solutions in Traditional Town Centers and Downtowns. New Hampshire is known for its "Yankee wisdom." This wisdom dictates the need for flexibility and common sense when planning for people, bicycles, cars and freight in historic town centers. There are no set standards deciding these issues – New Hampshire has no formal design guidelines. Instead, communities should let the context decide, reducing design speeds as necessary.[16] Nationally, these flexible policies are known as "context sensitive solutions" (CSS). However, these policies are nothing more than common sense solutions (see list below) and as such should be adopted as part of New Boston's master plan.

   Common Sense Solutions
   "The New Hampshire Way"

   - The project satisfies the purpose and need as agreed by a full range of stakeholders;
   - Communication with all stakeholders is open and honest, early and continuous;
   - All relevant disciplines are included on the project team;

[16] Many town main streets are state highways, which, by law, must have a safe design speed of at least 30 miles per hour. However, waivers of this requirement-called design exemptions-are allowed through application to the NH DOT.

- The project development process is tailored to the circumstances and examines multiple strategies to address the purpose and need;
- The selected strategy is in harmony with the community and preserves environmental, scenic, aesthetic, historic and natural resource values;
- Upon completion the project is seen as having added lasting value to the community; and
- Faster, better and more efficient strategies win over bigger, slower and more expensive.

2. Focus on Pedestrian Safety. This is true particularly in residential areas and the village center. New Boston can work to eliminate speed-based performance measures ("Level of Service") for state roads in urban areas at local option.[17] In addition, the Town can work to actively promote bicycling and walking by connecting and adding sidewalks wide enough for people to meet and talk as part of new subdivisions and infill projects. Streetscape improvements, brick sidewalks and crosswalks, traditional street lighting, benches and other amenities increase street life as well as property values. These measures should be considered in conjunction with the Town's ability to maintain them.

3. Create Incentives to Coordinate Land Use and Transportation. A greater priority and more local and state funding should be made available to those projects in New Boston where land and transportation has been effectively coordinated. This can be addressed as criteria for ranking transportation projects within the Town's CIP and as part of the Town's local roadway improvement priority list.

4. Engage the Private Sector. The private sector must be engaged to make more efficient use of the Town's transportation system through such initiatives as implementing flex time and telecommuting policies, "guaranteed ride home" programs, and private transit services. This can be encouraged by the Planning Board as part of the site plan review process.

5. Utilize the Services of the Regional Planning Commission. Improve local-regional planning partnerships to both assist in local problem-solving and address specific transportation issues of regional importance.

6. Increase Street Connectivity to Preserve Highway Capacity. Sometimes the best way to fight traffic congestion is to remove trips by increasing connections of local roads, and otherwise restoring and protecting traditional street grids as opposed to allowing more dead-end loops and cul-de-sacs to be built.

7. Work with NH DOT to Develop Highway Corridor Plans to Better Understand and Coordinate Land Use and Transportation. Before the NH DOT considers or

[17] Level of service is a letter-based performance metric keyed to desired vehicle speed. It is the speed a car should be able to travel on any specific roadway on the 15th most congested day of the year at peak hour traffic. For example, a Level of Service (LOS) of "C" means that a car should be able to travel at an average speed of 30 mph at the peak hour of the 15th most congested day of the year along the roadway.

plans to build or improve a new road segment or otherwise expand capacity, New Boston officials should encourage the Department to work with the community in developing a "corridor plan" to study how traffic will be generated and can best be distributed along the road. These plans can also be a vehicle for engaging local leaders in a discussion of how expansion, reconstruction, or increased access will affect adjoining land uses and how coordination could be increased to preserve community character.

8. Develop Corridor Management Plans to Protect Road Investments. Once a state project is built, NH DOT cannot preserve system capacity without local help. This requires joint development of corridor management plans that outline the roles and responsibilities of state and local governments in managing corridors in terms of the qualities to be preserved and the priorities for action needed by all parties (state, local and landowners) to maintain these qualities. Agreements implementing such plans should be negotiated before corridor improvements begin and before state projects are considered. This for example could be effective in protecting the River Road, NH 13, along the Piscataquog River.

9. Broaden Citizen Participation in Transportation Planning. More citizen engagement on transportation issues is critical. Before projects are identified and prioritized or submitted to the regional Transportation Advisory Committee (TAC) for consideration in the state's 10-year plan, more local citizen participation is needed. The Town of New Boston can take a role in this by holding and sponsoring public information workshops and transportation forums.

10. Develop a Comprehensive Transportation Plan for New Boston. A comprehensive transportation plan would help the community develop a broader vision for transportation for New Boston. It would also help to include other local and state agencies with resources to contribute in the development of the plan. These include, at a minimum, the Department of Health and Human Services (transit funding for youth, the elderly, disabled and low-income groups). Resources and Economic Development (economic development planning and public/private partnerships), Environmental Services (promotion of alternative transportation services), Office of Energy and Planning (smart growth planning) and Department of Safety (traffic law enforcement and assistance). This is the role of the transportation plan.

11. Adopt a "Wellness" Program Approach in Transportation Planning. New Boston could partner with SNHPC and NH DOT as well as other municipalities to fund small projects now which, when combined with local land use plans can help keep the town's roads healthy and prevent future problems instead of planning for major infrastructure improvements far in the future. "Faster, better and more efficient" over "bigger, slower and more expensive" projects should be the goal. These "common sense solutions" should be the focus of the Town's transportation planning, in cooperation with local partners, at all stages of project planning.

12. Clarify Transportation Language and Information to Make the Process Transparent and Accessible to the Non-Professional. For citizens to affect transportation decisions, transportation planning must become meaningful and understandable. Local, regional and statewide planners should also be able to draw from common data so everybody is "on the same page" about transportation trends, impacts, alternatives, processes and financing.

13. Develop New Performance Measures for Transportation Health. Traditional transportation performance measures focus on vehicle speed (faster is better) and vehicle congestion (less is better). People-oriented measures, such as making trip times more reliable, increasing trip choices, and reducing household costs of transportation could be developed and utilized by the Town in project planning. Also the Town could employ periodic "customer satisfaction" surveys and other on-going public outreach to encourage easy communication in project planning.

14. Leverage Public Funds with Private Investments. Transportation improvements add value to the land. New Boston can leverage that value to secure developer participation in the cost of access roads, local road and signal improvements or transit improvements to serve that development. This is especially important for infill development within the downtown area where a public transit station and pedestrian sidewalks could be installed through a combination of private funding and/or new property tax revenues that could be used as a local match for federal transit assistance or transportation enhancement project funding. Impact fees on new development could also provide necessary funding for road and pedestrian improvements to serve that development.

15. Creative Funding Opportunities Need to be Explored. Transit services and pedestrian improvements need clustered and dense development to justify the service. If it is not possible to allocate or increase the Town's share of local tax revenues for road or pedestrian improvements in the CIP, betterment assessment, bonding or tax increment financing (TIF) may offer the Town alternative and creative financing approaches.

6 COMMUNITY FACILITIES AND SERVICES

6.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left in various locations for residents who did not receive on in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to community facilities and services in New Boston:

Please rate the following:

Topic Area:	Most Important	2	3	Least Important	No Response
Quality of Education	**262**	134	56	32	19
Nearness to Outdoor Recreation	67	151	**161**	103	21
Shopping Facilities in Town	27	75	179	**209**	13
Parking in the Village	26	146	**211**	105	15

Would you like to see the following be built in New Boston?

Please rate them:	Greatest desire	2	3	Least desire	No Response
Library	152	84	87	**159**	21
Footbridge from trail to Post Office	88	94	95	**191**	35
Recreation facility	61	119	125	**152**	46
Multi-function community center	89	125	106	**150**	33
Swimming facility	62	60	100	**246**	35
Safety Complex	24	68	122	**238**	51

Do you believe a new library is needed?

Yes	No	No Response	Maybe
234	237	30	1

If a new library is eventually built, would you rather see it built (select one):

On site near Post Office	218
Site of present fire station	125
Somewhere else in the village	19
Somewhere outside village	12
On the hill back of the school	1
All possibilities	1
Nowhere	2

Do you think there is a need for additional recreational facilities in New Boston?

Please rank in order of:	Greatly needed	2	3	No need	No Response
Bicycle and bridle paths	**122**	147	109	85	40
Trails for walking, snowshoeing, etc.	130	**165**	106	66	36
Swimming/Boating/Fishing	74	118	**154**	111	46
Ice skating	49	85	**189**	130	50
Wildlife preserves	**199**	144	69	47	44
Playgrounds and ball fields	87	**149**	128	93	46
Activities for teenagers	135	**158**	102	67	41
Activities for adults	49	125	**174**	108	47
Activities for older people	75	**150**	139	92	46

Should additional fees be required of developers to help offset the additional costs of town services and improvements such as roads, police, school, fire dept, recreation, library, etc.?

Yes	No	No response	Maybe
436	55	11	1

The survey results show a range of opinions on current recreational facilities as well as the state of the library. Many respondents are satisfied with current facilities while some see the need to expand certain components such as bicycle trails, activities for teenagers, and wildlife preserves. An almost equal number of respondents felt there was a need for a new library as felt there was not a need for a new library, with comments suggesting that a smaller facility than that originally planned would please the greatest number of people. A great majority of respondents felt the Town should assess impact fees from developers to help cover the cost of infrastructure improvements resulting from the new developments. However, since there is currently no deficit in the Town and all expenses are covered by taxes, impact fees could be difficult to implement.

One of the primary functions of the New Boston town government is to provide community facilities and services for the safety and benefit of the Town's residents. In order to serve the growing population and the changing demographics of the Town, the community facilities must be updated and improved to meet the needs of the residents. Recent improvements to public facilities have included a new police headquarters, built in 1998, and minor improvements to Fire and Highway Department equipment and buildings. The Community Facilities and Services chapter also highlights anticipated improvements for the future.

New Boston's tax base is primarily residential, so therefore the Town must balance its facility needs and services with its desire to maintain a reasonable tax rate. Most large-scale improvements require bonds approved by the Town for funding, although the Town has been very successful in using Capital Reserve Funds (CRFs) to save money ahead of a large purchase, thus avoiding the interest payment that comes with bonding. Furthermore, the Town relies on many volunteers, which allows the Town to continue to offer a wide range of services while remaining fiscally responsible.

The information contained in this chapter was obtained through a Community Facility Survey Questionnaire, which was completed by municipal department heads, staff, and school officials in the fall of 2005. Map 10 showing the location of all the town's community facilities and services is also included in this chapter.

6.2 Goals and Objectives

Community Facilities Goal

To provide adequate and appropriate community facilities and services in the most cost-effective, efficient manner which will maintain and improve the quality of life for residents and visitors to New Boston.

Community Facilities Objectives

1. To recognize the contribution and encourage the expansion of participation and volunteerism by individuals and local service organizations in the donation of services and materials to the Town's facilities.

2. To continue to cost-effectively purchase, operate and maintain Town services and facilities.

3. To provide educational and training opportunities to Town employees and those who volunteer essential services, so that they may more effectively discharge their responsibilities.

4. To prepare and maintain a complete inventory of municipally owned and acquired properties (land and buildings) and to maintain the use of those properties as community resources.

5. To continue to utilize the capital improvements program as an efficient means of prioritizing the Town's expenditures for community facilities, and maximize the communication among those preparing the program and the participation of the community in the preparation process.

Objectives Related to Specific Community Facilities and Services

1. Recreation Objectives:

    a. To maintain, enhance and increase recreational opportunities and facilities for New Boston citizens of all ages and abilities and make more information available concerning same.
    b. To improve the identification of and information available concerning publicly available trail systems.
    c. To secure adequate and appropriate property to accommodate needed recreational facilities including offices, additional athletic fields, and a recreation/community center.

2. Solid Waste Objectives:

    a. To continue the Town's recycling efforts.
    b. To keep recyclable fee items reasonable – i.e. at cost.
    c. To find the best markets for the Town's recyclables.
    d. To provide efficient, cost effective means of Municipal Solid Waste disposal.
    e. To keep operating costs down by having properly trained staff and continual public education.
    f. To revisit all Standing Operating Procedures to ensure an effective cost/benefit ratio.

3. Public Safety Objectives:

    a. To develop a plan to provide adequate fire fighting water supply systems for the entire Town.
    b. To evaluate the adequacy of all departments involved in emergency response.
    c. To maintain an inventory of all Town bridges and the appropriate maintenance or replacement alternatives as consistent with the biennial bridge inspections.
    d. To develop a disaster preparedness plan and routinely test its effectiveness.

4. Library Services Objective:

a. To foster the Library's role in promoting community interaction by maintaining and enhancing the library as a valuable resource providing opportunities at many levels for all ages.
b. To provide facilities, materials, equipment and staff to support and ensure quality library services in a cost effective manner for the Town's entire population.

5. Education Objectives:

a. To provide facilities, materials, equipment and staff to support and ensure a quality education in a cost effective manner for the Town's entire student population.
b. To improve and expand opportunities for continuing and adult education.
c. To evaluate the renewal of the Area Agreement.
d. To study the feasibility of the establishment of a middle school and/or a high school in New Boston.
e. To emphasize and maximize safety in all facets of the school day activities of students.

6. Cemetery Objectives:

a. To provide sufficient land area in an appropriate location to accommodate future needs for burial plots.
b. To continue to cost-effectively maintain the cemetery.

Insert Map 10 Community Facilities here

6.3 Highway Department

Road and bridge maintenance, including snow removal, are the major responsibilities of the Highway Department. The Department occupies a one-story, wood-frame building on Old Coach Road that was built in 1980. It also utilizes a salt and sand shed and a three-sided metal storage garage that are located on the same site. The total area of the enclosed building is 2,700 square feet, and the total area of accessory buildings is 4,000 square feet. The Department, headed by and including the Road Agent, employs six full-time employees, with five additional subcontracted employees for snow removal.

The Highway Department shares fuel tanks with vehicles from the Police Department, the Fire Department, the Transfer Station, and the Recreation Department. Two new tanks, replaced in 1999, are underground, double-walled, composite tanks with leak detection systems with guaranteed usage until 2029. There is a 4,000 gallon diesel tank and a 1,000 gallon gasoline tank.

The Highway Department obtains winter sand from the town forestry land located off Cochran Hill Road near the Friendly Beaver Campground, with enough supply to last another three to five years. The Department purchases gravel from the Tingley pit in New Boston.

The Department owns a variety of equipment for road maintenance and snow removal, and it also hires additional equipment to handle winter storms on a seasonal basis.

Table 6.1
Highway Department Equipment

Vehicle	Year	Description of Features
John Deere 672CH Grader	1998	
John Deere 624J Loader	2005	
Ford F-550 Truck	2001	Plow with wing, sander, dump body, front mount rake
International 4900 Dump Truck	1997	With plow, wing and sander
International 4900 Dump Truck	1994	With plow, wing and sander
Mack R Model	2003	With plow, wing and sander
Mack Granite	2003	With plow, wing and sander
International Tank Truck	1969	For cleaning culverts
Elgin Pelican Street Sweeper	1978	
Chevy 4x4	1998	Pick-up truck
Chevy 4x4	1996	Pick-up truck
Tow Behind Road Rake		Raking dirt roads
Tow Behind Street Sweeper		
Morbark Chipper		
John Deere Backhoe 410	2006	

Source: Town of New Boston Highway Department

The Highway Department maintains all roads in the town and removes snow from the school and town related parking lots, i.e. Town Hall, Fire Department, and Police Station.

The Highway Department does not maintain the cemeteries or any recreation grounds. As the town has grown in population, the Highway Department has had to increase improvements to roads, such as culvert cleaning and replacement, brush cutting, road raking and regrading, and pothole repair.

Due to an influx of subdivisions with new town roads, the salt storage at the Department is becoming inadequate, presenting the need to build a new salt shed in the future.

The Highway Department's plans for the near future are to catch up on pavement overlays for paved roads as well as reclamation projects in order to get all of the town's roads on schedule for repaving every 10-12 years. Following those improvements, the Department will bring some gravel roads to pavement status. Road maintenance projects in the near future include improving the outer end of Bedford Road to Chestnut Hill Road. Over the next ten years, the Highway Department will be replacing the Lyndeborough Road bridge and the Gregg Mill Road bridge, the last two major bridges that need to be replaced in New Boston. Eventually, the bridge on Hilldale Lane will need to be replaced also.

6.4 Sewer and Septic Systems

The Town has no current sewer system nor any plans for future collection and treatment services. The adjoining Town of Weare has a receiving and processing facility for septage disposal. New Boston has a contract with All Clear, the company in Weare. Independent septage companies can haul to Weare or any other approved facility.

6.5 Water Supply

Without a municipal water system, residences and businesses get water from approximately 1,500 wells currently located in Town. Many wells have hard water, sulfur, and other minerals. Town buildings served by wells are the Town Hall, the Fire Department, the Library, the Central School, the Police Department, the Transfer Station, and the Highway Garage. There are no known problems with water pressure or maintenance of the wells. Additionally there are several community water systems in New Boston, although the exact location and extent are not known. Two known locations are at Mill Street and Styles Road.

6.6 Transfer Station

New Boston disposes of its solid waste at the New Boston Solid Waste Transfer Station and Recycling Center, built in 1988 and designed as a collection point for waste to be transferred to an approved disposal site as well as for recyclable and reusable items. Since 1995, the Town has had a waste disposal contract with Wheelabrator Technologies Inc. in Penacook, NH. The solid waste disposal history for this facility over the past three years is as follows:

Year	Waste disposed	Cost
2003	1,936 tons	NA
2004	1,511 tons	$67.50/ton
2005	1,320 tons	$66.71/ton

The facilities of the Transfer Station and Recycling Center consist of a metal building with 3 vertical balers for material compaction and collection areas for cardboard, paper, plastics, and reusable items. The building also contains a skid steer loader. The Station has two transfer trailers for the transport of solid waste, with hauling services hired out. The Station also has collection bins for glass, aluminum, cardboard, clothing, newspaper, and metal collection. The Town built a 2,400 square foot recycling building in 1990, installed a waste oil furnace in 1994, erected a chain-link fence in 1994, installed a water supply and septic system in 1998, and added a demolition collection area and brush collection/processing area and scales in 2005.

Table 6.2
Transfer Station Equipment

Item	Year	Est. Value	Replacement Schedule
Accurate Waste Compactor	2006	$67,000	2030 (every 25 years)
New Holland Skid Steer Loader	1998	$40,000	2008 (every 10 years)
Epco Downstroke Baler	1990	$10,000	2005 (every 15 years)
Philadelphia Tramrail Downstroke Baler	1990	$10,000	2006 (every 15 years)
Transfer Trailer	1988	$45,000 to $50,000	2007 (1 scheduled)
Stecco Trailer	2002	$40,000	2012 (every 10 years)
Komatsu Forklift	1982	$6,000	
Selco Baler	1990	$10,000	(every 15 years)
Weightronix Scales	2004	$36,000	2034 (every 30 years)

Source: Town of New Boston

In the past five years, the Transfer Station has acquired a new Ram compactor, an efficient set of weigh scales for construction and large-scale debris, and a third baler for plastics. The facility has also developed a new system for the collection and containment of oil as well as a new "recycle by the number" program to simplify the recycling process for the public.

Recycling is mandatory and residents can bring in their recyclables and sort them at the Station or hire one of two private contractors to transport the items. The private haulers, B and A Waste and Capitol Trash Pickup, must either abide by the recycling guidelines or pay disposal fees. The Station also has a compost pit for yard waste and lawn clippings and a new method for brush processing. The Town sponsors an annual Household Hazardous Waste Collection Day where residents can bring domestic hazardous materials such as paint, oil, gasoline, and pesticides, to a collection point where the materials are transferred for proper disposal or recycling.

The most significant problems that the transfer station has faced in the past few years include illegal dumping from private haulers and contractors, community acceptance of the Mandatory Recycling Program. The lack of means to provide fair fee assessment was rectified with the installation of the scales in 2005 and open burning at the Brush Pit is no longer an issue since the Town now chips this material.

In the short term, the Transfer Station Facility will be able to accommodate the anticipated population growth of the town and the ensuing increase in solid waste with few physical adjustments. The Transfer Station and Recycling Center should meet the Town's needs through 2015, with the addition of a storage building for recyclable items. In the long term, the mandatory recycling program may exceed the facility's capabilities to store and sort recyclables. Additionally the ability to dispose of solid waste at a reasonable cost could become increasingly problematic.

6.7 Town Hall

The Town Hall is located on Meetinghouse Hill Road in the Town Center, adjacent to the New Boston Historical Society. The building was originally built as a Town Hall in 1887, with a traditional two-story wood frame. The first floor houses offices and data and record storage. The first floor also contains a conference room where many town board and committee meetings occur. The second floor and third floors, which are not handicapped accessible, contain additional meeting and office space. The offices located in the building are those of the Town Clerk, the Bookkeeper/Tax Collector, the Planning Department, the Assessing/Selectmen, the Town Administrator, the Building Department/Fire Inspector, and the Recreation Department. The building currently employs seven full-time employees and six part-time employees. The hours of operation are Monday through Friday from 9 a.m. to 4 p.m., as well as 4 p.m. to 8 p.m. on Thursdays, but departmental hours vary.

The building is adequately constructed, insulated, and outfitted with appropriate smoke/heat detection and new sprinkler systems. The departments are linked to a network server and new phone systems have been installed. Other recent improvements to the building since the last Master Plan update of 2000 include new boilers, a new fire and alarm panel, and a new slate roof. Nonetheless, the building is overcrowded and in need of redesign.

The Town Hall is scheduled to undergo a renovation of the first floor in 2010. The renovation of this 3,600 square foot area will incorporate future growth considerations and better allocate space among the town's departments. This will also include improvements such as new floor tile and upgraded wiring.

6.8 Historical Building

The Historical Building is located in the original fire station and former Town Office, adjacent to Town Hall. The building is used by the New Boston Historical Society,

which holds meetings every other month. The building is open to the public every Thursday from 12 to 2 p.m. and houses historical artifacts from the Society's collection.

The building is handicapped accessible and has appropriate fire detection and sprinkler systems. The building has recently received new paint, a new phone system, a new alarm/fire panel, and repair to its cupola. The building could be renovated further for use by a different tenant or for town government use. If a new library building is approved, the Historical Society could move into the old library building.

6.9 Protective Services

The two basic protective services in New Boston are police and fire. The Town's recent population growth has created challenges in terms of protective services. Increased housing and commercial development have resulted in more vehicles on the road and more establishments in need of protection with an increased likelihood of emergencies and accidents.

Protective services will need to adjust to meet these new demands, and at this stage the Town can improve services as a preventative measure. By establishing policies that promote public safety, such as upgrading roadways to facilitate emergency vehicles, the Master Plan can assist in preventative efforts.

6.10 Police Department

A two-story, 4,600 square foot police headquarters at 116 Old Coach Road, was completed in 1998. The building consists of administrative offices, a training room, a booking room, locker rooms, toilet facilities for the holding cells, and the installation of an emergency generator. Some improvements remain to be completed, including the holding cells, the installation of a fire sprinkler system, the addition of a radio/telephone recorder, and the installation of security cameras. Improvements made since the 1997 Master Plan include a roof over the back exterior walkway, waterproofing a garage bay, a fenced storage shed, and an upgraded replacement generator.

The Town currently employs:

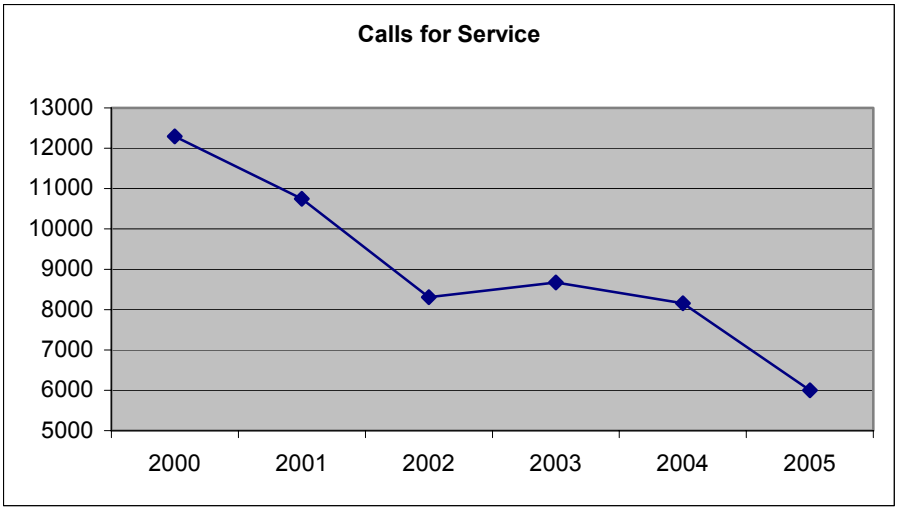
- 1 Full Time Chief of Police
- 1 Full Time Sergeant
- 2 Full Time Police Officers
- 1 Part Time Police Officer
- 1 Full Time Administrative Assistant
- 1 Part Time Records Clerk

On most occasions, only one officer is on patrol in Town, eliminating the need for multiple police districts, a practice that may change as two or more officers becomes the norm.

Figure 6.1 on the following page illustrates the number of calls for service received annually by the Police Department. The figure for 2005 is estimated for the full year and

shows a significant decrease in calls, partly due to being short-staffed for much of the year, and making fewer motor vehicle stops.

Figure 6.1
Calls for Service in New Boston, 2000-2005



The current staffing levels of the Department allow for one officer to work for 16 hours per day, seven days a week. Between 11 p.m. and 7 a.m., the New Hampshire State Police answer calls in New Boston, with response time varying greatly depending on their location. A back up off-duty call program exists with the Goffstown Dispatch Center, which contacts an off-duty, on call New Boston Police Officer to respond from his home.

New Boston is one of several communities in the process of enacting a regional mutual aid organization called the Hillsborough County Regional Response Team. The Police Department also has seven written mutual aid agreements with Bedford, Mont Vernon, Lyndeborough, Weare, Francestown, Amherst, and Goffstown. The Department also contracts with the Town of Goffstown Police Department for Dispatch Services, with services set on an annual basis. The Department currently leases three primary emergency use cruisers, which travel approximately 20,000 miles annually and are on a four-year cycle for replacement. The Department's vehicles are as follows:

Vehicle	Ownership	Mileage
2005 Ford Expedition	Leased	1,400
1999 Ford Explorer	Owned	101,435
2005 Ford Crown Victoria	Leased	4,327
2005 Ford Crown Victoria	Leased	1,191

The Police Department will need to purchase computer equipment upgrades, complete the holding cells, install a fire suppression system, install a security camera system, and install an alarm system by the year 2010. The Department also foresees additional spending on officer benefits and manpower increases, infrastructure improvements, and

expansion of services provided. These changes are based on the limitations of existing programs and staff as well as the increasing population of New Boston.

6.11 Fire Department and Rescue Squad

The Fire Department was organized in the late 1800s as the Constitution Company. It is located on Meetinghouse Hill Road in a building originally constructed in 1973 and expanded in 1980. The building is three bays wide by two bays deep, and it also contains a radio room, a hose tower, bathrooms, and a large storage area. The second floor over the rear of the building contains a meeting room and a kitchen. There is an on-site septic system as well as water from a well adjacent to Town Hall.

Replacement apparatus must be based on the size of the existing building (door openings) and the department has begun to speculate the need for a new building to replace the existing one.

Table 6.3
New Boston Fire Department Vehicles

Vehicle	Year	Features
KME Pumper (76M1)	1991	6 person crew cab; 1,000 gallon tank; 1,250-gpm pump; 12, 24, and 36 foot ladders; 9 air packs; 1,000 feet of 4-inch hose; 250 feet of 2 ½-inch hose; and 1,000 feet of 1 ½-inch hose; thermal imager; 5 handheld radios
KME Pumper (76M2)	2006	6 person crew cab; 1,000 gallon tank, 1,250-gpm pump, 12, 24, and 36 foot ladders, 9 air packs, 1,000 feet of 4-inch hose; 250 feet of 2 ½ -inch hose; and 1,000 feet of 1 ½ -inch hose; thermal imager; 5 handheld radios
Ford L8000 diesel Reel Truck (76M4)	1994	1,000-gpm pump; 2,800 feet of 4-inch hose
Ford L9000 diesel Tanker (76K1)	1988	2,200-gallon water tank; 2,000-gallon portable tank; and a portable pump
International Forestry Truck 4x4 (76M3)	1975	875 gallon water tank, 250 gpm pump, assorted hand tools for forest fires, 2,000 gallon porta-tank, 2 floating pumps, 1 wajax pump, 1 reel equipped with 750' of forestry hose, and 1 reel equipped with 750' of single jacket, 1 RobWen foam proportioner, 5 pre-packed forestry bags each containing 300' of 1½" forestry hose gated wye, nozzle and hose clamp.
Ford F450 Ambulance 4x4 (76X1)	1999	With necessary equipment, state licensed
Ford F350 Ambulance 4x4 (76X2)	1989	With necessary equipment; stationed at Hilltop Station; state licensed
Ford F450 Utility Body (76U2)	2006	With cascade system for refilling air packs; forestry tools; backup medical equipment (defib, O2, jump kit); 5,000 watt generator

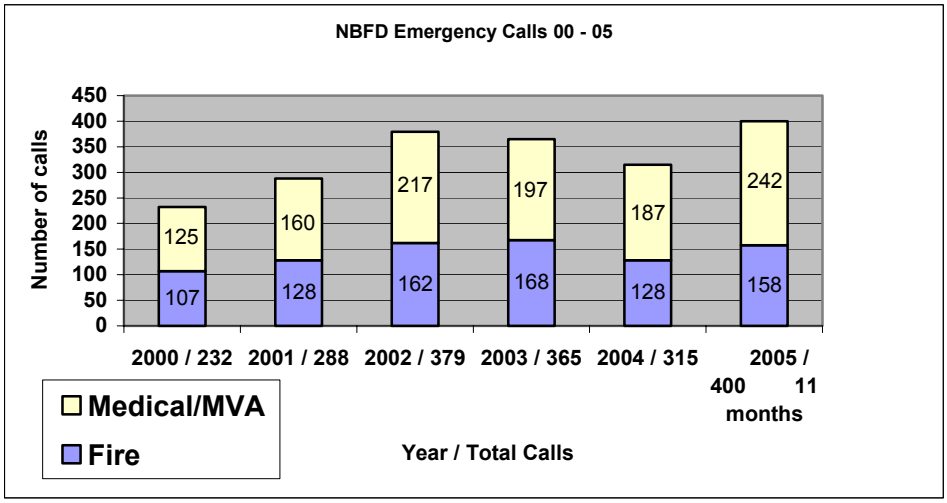
Source: Town of New Boston Fire Department

A FEMA grant to the Department financed $171,000 of the purchase of a new forestry vehicle to replace the 1975 Forestry Truck, with the Town funding the remaining percentage. The old vehicle will remain in use as long as it functions.

A primary goal of the New Boston Fire Department is to stay volunteer for as long as possible. There are currently seven elected Fire Wards who annually elect a Fire Chief and two Assistant Chiefs, who manage the daily operations and the volunteer firefighters. All positions are voluntary with the exception of a part-time fire code inspector and investigation officer who works 8 hours a week. The Fire Wards are also responsible for ensuring the access, adequacy, and maintenance of water supplies available for firefighting purposes. A challenge to maintaining the volunteer aspect of the department is the availability of a senior leadership person to drive the recruitment and training of volunteers. As the organization transitions through the retirement of senior members, the department hopes to find younger members willing to step up to these positions.

The volunteer personnel are comprised of 50 Fire and Rescue squad members. The Rescue squad has 16 EMTs. Most Fire squad members are level-1 certified firefighters with HAZMAT certification, six members are level-2 firefighters, and several are certified as firefighting training instructors. Daytime fire calls bring five to six firefighters in five minutes and 12 firefighters available within 20 minutes. Evening and weekend calls have up to 25 firefighters responding to a call.

Figure 6.2
New Boston Fire Department Emergency Calls, 2000-2005



Source: Town of New Boston Fire Department

Calls to both the fire and rescue squad have increased significantly over the past five years, as illustrated in Figure 6.2. Using the approximate rate of 436 calls for 2005, the total calls have increased 88 percent since 2000, with medical calls up 110 percent and fire calls up 62 percent over the same time period. Approximately 60 percent of all calls are for the rescue squad, which results in the occasional volunteer shortage during normal working days.

The Hilltop Fire District was established in cooperation with the fire departments of New Boston, Amherst, and Bedford, and the U.S. Air Force at the New Boston Tracking Station. As Amherst and Bedford have since ended their relationship with the station, New Boston now provides coverage on-call throughout the week. The Air Force requested that New Boston maintain the station, in exchange for use of their equipment and tools. The Air Force maintains a 76-M6 engine, a 76-M5 yellow mini-pumper, a set of Hurst tools, and a thermal imaging camera. The New Boston Fire Department also keeps their 76-X2 ambulance at Hilltop.

New Boston is a member of the Souhegan Mutual Aid Fire Association, a 15-town collaboration of personnel and response vehicles for emergencies within the communities. New Boston is also part of the Souhegan Mutual Aid Response Team (SMART) to respond to hazardous materials incidents.

The Fire Department and Rescue Squad have determined that they will need a larger facility within the next five to seven years. The space is needed to house the larger apparatus, include additional storage space, and fulfill the long-term plan of office space and a working area for full-time personnel.

Map 11 on the following page identifies all the existing fire ponds and cisterns in the Town of New Boston.

6.12 Emergency Management and Hazard Mitigation Planning

Because of the importance of planning for and protecting the Town's community facilities and properties, in June of 2001, SNHPC began preparing a local Hazard Mitigation Plan for New Boston. Funding for this work came from the N.H. Office of Emergency Management. A committee was formed of representatives from various local agencies including the Planning Board, Board of Selectmen, Police Department, Fire Department, School Board and private citizens.

The Hazard Mitigation Plan identifies natural hazards affecting the Town and the risks they present to property in terms of potential losses. The plan also identifies measures currently in place and those that could be implemented to mitigate such natural disasters. The following categories of natural hazards were addressed in the plan: flooding, wind, fire, ice and snow events, and, earthquake.

On November 4, 2002, the plan was adopted by the Board of Selectmen. A second public hearing was held on January 26, 2004, to accept changes and updates since the initial adoption and the Board of Selectmen voted to approve these changes on February 9, 2004. It is intent of the Board of Selectmen that the Hazard Mitigation Plan be monitored and updated as needed and that mitigation measures be implemented as feasible. A copy of the New Boston Hazard Mitigation Plan is available in the Planning Department at the Town Hall. The New Boston Hazard Mitigation Plan is incorporated by reference as a part of the Town's Master Plan.

Insert Map 11 Fire Fighting here

6.13 Recreation

The Town of New Boston contains an array of buildings and fields dedicated to recreation, including the New Boston Playground, the Daniels Memorial Tennis Court, the Hillsborough County 4-H Youth Center, several ball fields, and the use of the gym at the New Boston Central School. The New Boston Recreation Commission works to provide programs to the people of New Boston, and the New Boston Friends of Recreation are volunteers to help with recreational programs. The Commission also works with the non-profit New Boston Playground Association, which owns the 3.75 acre site occupied by the ball field and playground in the Town Center.

The New Boston Playground Association, founded in 1921, is dedicated to the health and welfare of the children of New Boston. The Association acquired the land for the playground and ball field as well as the Depot Building where it held its meetings for many years. The Association has sponsored a variety of recreation programs and events, purchased equipment for the recreation facilities it owns, and maintained its buildings and grounds.

The Recreation Commission runs a variety of adult programs, including First Aid/CPR, basketball, scrapbooking, yoga, and Italian conversation. Senior programs include senior trips, monthly lunches, monthly movies, and blood pressure clinics. Children's programs include an after school program, archery, baseball/softball/t-ball, basketball, gymnastics, karate, play group, soccer, and dances.

The Recreation Department has one full-time Director in charge of program development, fiscal management, staff, facilities, and special events. A part-time Assistant works closely with the Director. Eleven other part-time employees include directors and counselors of after school and summer programs.

Many recreation programs are housed in the White Buildings, located between the Central School and the New Boston Town Hall. A skateboard park was built in July 2005 adjacent to the white buildings. The white buildings and the school gym are overcrowded, and the Old Coach fields are difficult to maintain due to lack of irrigation.

The short-term needs for the Recreational Facilities include irrigation, landscaping, and fertilization plans for the Old Coach fields. Other short-term goals include starting programs in Dodgeball, Flag Football, Adult/Teen Softball league, and a "Teen Club." Long-terms goals include a multi-use community center by 2011, which would allow the Recreation Department to vacate the Town Hall, ease pressure on the school gym, and offer new programs.

According to the results of the Community Survey, New Boston residents support nature recreational opportunities, such as the improvement of the trail network in New Boston and the creation of new nature preserves or wilderness areas. The Conservation Commission maintains Town-owned trails.

6.14 Educational Facilities

New Boston is part of School Administrative Unit (SAU) #19 and shares a superintendent and an administrative staff with Goffstown and Dunbarton. Dunbarton and New Boston pay tuition to send their students in grades 7 through 12 to Goffstown middle and high schools under an Area Agreement in existence since 1971. New Boston School Board members control the budget, policies and curriculum for the New Boston School District and have voting power for the SAU #19 Board in proportion to the percentage of New Boston students in the SAU student body.

The New Boston Central School was constructed in 1953 on a seven-acre site on Route 13 north of the Village and contains an on-site well and septic system. Additions were made in 1967, 1987, and 2000. As illustrated in Table 6.4, the school had 513 students from pre-school to grade six enrolled in November 2005. New Boston sent 103 students to Mountain View Middle School and 296 students to Goffstown High School for the 2005-2006 school year.

Table 6.4
School Enrollment for New Boston, 2000-2005

Grade	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
PreK	37	23	20	25	26	20
K	N/A	61	55	57	55	54
R	11	16	15	17	16	12
1	79	62	83	72	76	77
2	52	78	61	81	65	70
3	59	49	79	63	77	65
4	84	62	51	79	62	73
5	71	81	57	53	83	61
6	70	69	81	58	55	81
Total	**463**	**501**	**502**	**505**	**515**	**513**
MOUNTAIN VIEW MIDDLE SCHOOL						
7	66	68	71	86	55	51
8	63	63	73	71	80	52
GOFFSTOWN HIGH SCHOOL						
9	52	52	65	71	76	79
10	55	55	53	70	76	73
11	48	48	56	60	67	85
12	32	32	48	59	51	59

Source: SAU 19

The myth that every new single-family detached housing unit generates two children in the school system has been proven to be flawed reasoning in a study prepared by Russ Thibeault for the New Hampshire Housing Finance Authority on Housing and School Enrollment in New Hampshire: An Expanded View, May 2005. This study found that the conventional belief that each new housing unit generates 2 school-age children is inaccurate. In 2000, according to the US Census, the typical New Hampshire housing unit actually generated 0.45 public school students. Furthermore, this figure is expected

to decline in the future. The reason for the high figures from 1990 to 2000 was the baby boom, which created a larger number of parents. However, this group had peaked by 2005 and the evidence supports minimal impacts on public schools due to increased supply of housing in New Hampshire. Rather than each housing unit creating an additional two school-aged children, the reality is that:

- Only 26 percent of the state's occupied housing units are occupied by a married couple with children under the age of 18 (including children not yet enrolled in school).
- Thirty-three percent of the state's occupied housing units consist of a household head aged 55 or over – unlikely to have school age children.
- Twenty-four percent of the state's occupied housing units have only one person living in them.
- Thirty-one percent of the state's occupied housing units are occupied by non-family households, meaning no relatives, children or otherwise, occupy the unit.[18]

As shown by the school enrollment figures statewide, as well as for New Boston, the baby boomer generation's children are now graduating from public school systems. School-age populations are expected to peak in 2005 statewide and gradually decrease going forward. This trend is supported by the fact that first grade school enrollment is dramatically lower today. Total public school enrollment is now declining modestly in New Hampshire. While figures for school enrollment in New Boston, as summarized in Table 6.4 do not show a dramatic decrease among the first grade population, there have been slight decreases in the total number of kindergarten students, indicating the possibility that New Boston will progress along the same lines as the state, only a bit slower.

The New Hampshire Housing Finance Authority's study concludes that multi-family housing units generate even less school children per unit while providing a diverse housing stock. Single-family units generate 0.54 students per unit, two-family units 0.38, three or four unit buildings 0.34, five or more unit buildings 0.21 and mobile homes 0.34 for an average of 0.45 children per unit. Additionally, local data collected from Bedford, Hudson, Lebanon and Rochester for housing units built between 1998 and 2004 indicate that condominiums generate only 0.12 students per unit. Thus, not all housing units are creating the same amount of school enrollment. Overall, new single-family detached, two-family, multi-family consisting of three or more units, and mobile homes are not generating the burdensome growth in school population many believe it is. New Boston should consider conducting a similar study to determine if the findings of the New Hampshire Housing Finance Authority study hold true and if so, should not limit new, diverse housing options based on the myth of housing and school enrollment.

[18] Ibid.

Table 6.5
Appropriation and Expenditure for New Boston Schools

Year	Total Appropriation	Tax Assessment	Local School Rate	Local/State Rate	Actual Expenditure	Percent of Total Appropriation
2005-2006	8,220,277	4,560,666	16.46	20.86	NA	72%
2004-2005	7,819,365	4,492,239	17.00	21.71	7,760,300	75%
2003-2004	7,360,971	3,504,442	13.89	20.12	626,792	72%
2002-2003	6,687,025	2,779,205	11.66	17.91	6,646,695	72%
2001-2002	6,603,744	2,456,302	11.03	17.64	6,427,531	68%
2000-2001	5,724,795	2,409,114	11.56	17.76	5,535,239	71%

Source: SAU 19

Table 6.5 above shows the amount of public funds appropriated for education and the amount actually spent each year from 2000 to present. Both the local and state rate for educational appropriation have increased significantly since 2000, while the total percentage of the appropriation spent has remained fairly consistent.

The school currently utilizes all 26 of its classrooms. Twenty-two rooms house grades 1-6, with three to four classrooms per grade level. Two rooms are for the half-day sessions of public kindergarten. As each session is only 2½ hours in length, there is a potential for four sessions in the two classrooms, though only three sessions (two morning and one afternoon) have been needed since instituting kindergarten in September 2001. One classroom is for the integrated pre-school, providing programming for three and four-year-olds with educational disabilities. The final classroom is used for the Readiness program, serving those students who meet the age requirement for first grade but developmentally require an additional year.

Population projections for New Boston students predict the need for portable classrooms in the 2008-2009 school year. These would meet the new State Minimum Standards on maximum class size, which are as follows:

- K-2: 25 students or fewer per teacher, with schools striving to achieve 20 students or fewer per teacher.
- 3-5: 30 students or fewer per teacher, with schools striving to achieve 25 students or fewer per teacher.
- Middle and high school: 30 students or fewer per teacher.

Additionally the facility must comply with space standards, requiring 30 square feet per child in grades R-6. After an addition renovation project in 2000, the projected enrollment for NBCS was 600 students. Since 2000 the NBCS added two kindergarten classrooms, which including accessory bathrooms and storage space, amounts to 2,341 square feet.

The high school population has been higher than projected in the budget. In 2005 there were 289 students projected and 296 actually enrolled. At a cost of $8,454 per student, the seven additional students have a substantial impact upon the town budget.

The Central School facility serves as a meeting area and recreational complex for New Boston residents. Public assembly areas host elections, town meetings, and board and committee meetings and the gym is used extensively by the Recreation Commission.

The school's primary facility need is a roof replacement for the school in 2008. The roof was last replaced in 1987, and the new roof is estimated to cost $90,000. The New Boston School District has the long-term goal of constructing a middle school to serve students in grades 5 through 8, such that the Central School would serve students only through grade 4 and only high school students would leave town to attend Goffstown High School.

6.15 The Whipple Free Library

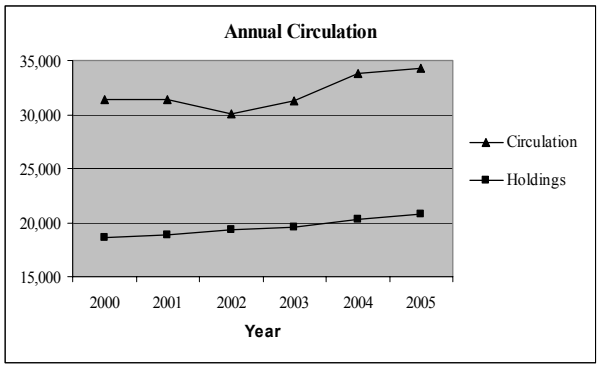
The Whipple Free Library serves the Town of New Boston with over 19,600 volumes in stock. The library includes large print books, reference, periodicals, books on cassette and CD, videotapes and DVDs, public Internet access, and fax and copy machines. The Whipple Free Library also contains valuable resources on local history, including the New Boston History Collection and the New Hampshire History Collection. Additionally the Whipple Free Library participates in the Statewide Interlibrary Loan system. Public programs include story hours for children and book discussions for adults.

The library employs one full-time Director (over 30 hours per week), an Assistant Director for 20 hours a week, a Children's Librarian for 30 hours per week, two part-time employees working 20 hours per week, and four part-time employees working between four and seven hours per week. The Friends of the Whipple Free Library provide fundraising and other support services through an annual auction and book sale. With these funds they have helped to purchase volumes and multi-media for the library and have assisted with physical library enhancements.

The Whipple Free Library currently has severe space constraints. There are nearly 700 books in storage and a lack of staff workspace. In 2004 a library warrant article asked for $888,500 in a 15-year bond that would add 32 cents per $1,000 of assessed value to the tax rate. However, the bond received only 50 percent of voters' support, less than the three-fifths majority needed for approval. Despite the outcome of this vote, the Library Trustees continue to work toward raising enough money, and rallying enough community support, to build a new library. Although there is no known target amount or deadline for this funding, the Trustees are focusing their efforts on better defining and resolving the many variables that will ultimately impact future ballot initiatives and decisions. Sharing the building, or a portion of the land, with appropriate Town recreational or educational facilities remains a very real possibility.

There is currently an 11-acre parcel of land located along the Piscataquog River behind the Post Office, which was deeded to the Town of New Boston by Randall and Gail Parker. This parcel of land contains a deed restriction which states that it can be used by the Town only for a library, for conservation, for recreation, and/or for educational purposes, and that it never be used by the Town for residential, commercial, or industrial purposes.

Figure 6.3



Source: Whipple Free Library

Facility improvements made since 2000 include a very small office area, lighting in office area, re-shelving of audio and visual collections, a new book drop near the Mill Street entrance, and small chairs replacing large leather lounge chairs. Program and service changes implemented since 2000 include an increase in public access computers, increased audio-visual materials, a teen advisory group for teen programs, monthly adult and children's book discussion groups, a Knitting Group, and a library website. Physical needs of the library include repair to water damage in the walls and ceilings, repair to exterior masonry, improvements to sidewalks, replacement of a wooden fence, repositioning the handicap entrance, shelving and lighting improvements, quiet study and reading areas, and additional storage space.

6.16 Town Cemetery

The first recorded burial in New Boston was of a female child of Captain George Cristy. The date was 1762 and the burial was near the first meetinghouse situated in the central part of the Cemetery. All that remains of the meetinghouse today is a stone marking the approximate location of the building. The first grave has no marker visible today, but is probably within the first cemetery laid out by the Town Meeting in 1788, containing 1 1/8 acres, just to the north of the old meeting house.

The first cemetery served the early settlers until the mid-nineteenth century when space for further burials became unavailable. The early settlers also established four neighborhood burial grounds in remote areas of Town. There are four known sites and these have become neglected during recent times. Descendents of many early settlers buried in these small cemeteries have moved away. The Town Meeting of March 16, 1996 (Article 21) voted to confirm the abandoned status of these burial grounds under the provisions of NH RSA 289:19 and to place the responsibility for maintenance with the

Selectmen. The Historical Society has records concerning the locations of these small cemeteries and a record of headstone epitaphs.

At the Town Meeting of 1852, voters authorized the Selectmen to purchase a triangular tract of land between the Cemetery Road and the east side of the Old Cemetery. The Town struggled for a number of years with the need to further enlarge the burial grounds, but no consensus was reached. Elbridge Wason brought to the Town Meeting an offer to give land in trust for the purpose of establishing a graveyard benefiting all residents. This trust provided that a Board of Trustees would manage and maintain the New Boston Cemetery for the benefit of the Town. Mr. Wason's philanthropic proposition was accepted by the Town Meeting in 1868 by majority vote on Article 24. This increased the area of the cemetery to 5 acres, extending to the north, west, and south of the Old Cemetery.

Until 2001, the Trustees, appointed for life terms, kept the records, conveyed the lots, supervised the interments, and maintained the grounds by engaging a Superintendent. Article 11 of the 2001 Town Warrant authorized the transfer of the cemetery from private to public ownership with a public Board of Cemetery Trustees to oversee operations. This change was undertaken as trust fund money had to be supplemented by ever-larger public support via town operating budget appropriations.

In 1975, Roger B. Webber gave 1.96 acres of land south of the existing Cemetery to the Trustees for the purpose of enlarging the grounds. This was a timely acquisition- as most of the lots in the original cemetery have been purchased. A design of the layout to be employed on the land gifted by Webber shows potential for 596 gravesites. This addition will provide capacity for an estimated 50 years. Approval to move forward with site preparation was given in 2005. The addition is expected to be ready for burials by late 2006.

6.17 Conclusion

From the fire department to various boards and commissions, the spirit of volunteerism runs high in New Boston. The Town could not function without these many dedicated individuals. As in any community, the impact of future growth on a town's services is concerning. The Town can anticipate and prepare for future growth and the accompanying pressures on its community facilities by analyzing trends related to transfer station processing, calls for service by police and fire, and education. Maintaining an inventory of the Town's service vehicles is also a key ingredient in planning for future growth impacts. This information can help residents make decisions regarding future community facility needs such as possibly a new library, school, fire department or vehicles.

7 NATURAL RESOURCES

7.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left in various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to natural resources in New Boston:

Do you feel it's important to protect land on both sides of the scenic drive along Rt. 13 (River Road) and the Piscataquog River?

Yes	No	No response
456	40	7

Should wildlife corridors be set aside as a part of future development?

Yes	No	No response	Maybe
383	90	28	2

How important do you feel are the preservation or implementation of the following items?

Please rate them:	Most important	2	3	Least important	No response
Fields	**277**	140	36	15	35
Forests	**338**	97	24	13	31
Wetlands	**318**	104	33	19	29
Mountaintops/hillsides	**305**	106	34	20	38
River views/shorelines along Rt. 13	**370**	81	18	10	24
Wildlife corridors	**291**	112	45	25	30
Conservation easements	**267**	126	55	21	34
Limit nighttime light pollution	**167**	138	98	62	38
Limit noise pollution	**208**	145	76	42	32
Open Rural Character	**344**	114	20	10	15
Sense of Privacy	**311**	125	41	16	11
Preservation of Natural/Historic Resources	**280**	143	49	12	19

Should every subdivision over a certain size be required to provide open space?

Yes	No	No response
411	69	23

7.2 Goals and Objectives

Conservation and Natural Resources Goal

To preserve, protect, and enhance the Town's scenic, recreational, open space and natural resources, as well as its environmentally sensitive areas, and where appropriate, to encourage the enjoyment thereof.

Conservation and Natural Resource Objectives:

1. To continue to develop and improve ordinances and regulations that protects New Boston's environmentally sensitive areas. These areas include, but are not limited to; steep slopes, wetlands, woodlands, floodplains, wildlife habitats and corridors, watersheds, drumlins, wetland buffers, and aquifer recharge areas.

2. To determine development densities based on maintaining open space, rural character, future water needs, soil capability, Smart Growth Principles[19] and other environmental criteria.

3. To create regulations to promote environmentally responsible construction practices including habitat-sensitive site design, low impact development[20], landscape design criteria, prevention of soil erosion and stormwater treatment.

4. To encourage preservation and development of farmland using environmentally responsible agricultural practices.

5. To promote the awareness of public open spaces and natural resources including the awareness and preservation of existing Class A or B recreational trails established under RSA 231-A.

6. To regulate development along scenic roads in order to preserve the natural and scenic character, including stonewalls and a forest buffer, and investigate participation in the Scenic Byways Program.

7. Implement an anti-litter ordinance to protect the Town's highways.

[19] Smart Growth Principles. See RSA 9-B Smart Growth and the Future Land Use Chapter of this plan.
[20] Low Impact Development is a process of developing land to mimic the natural hydrologic regime. It incorporates land planning and design practices and technologies to achieve this objective.

8. Create regulations to promote proper use of lighting to use less energy and to limit light pollution.

9. Implement a noise control ordinance to strengthen state control of vehicle and other noise.

10. To act in accordance with the recommendations of the Piscataquog River Management Plan which was prepared by the Piscataquog River Local Advisory Committee and adopted by the New Boston Planning Board in June 2000.

11. To identify and preserve aquifers of such quality and quantity that may provide the Town of New Boston with future water supply sources.

12. To identify, preserve, maintain and protect large areas of land, which have been identified as having unique functions and values contributing to the economy and environmental well being of the community. Use of the information that has been developed under the Regional Environmental Planning Program may assist in this effort.

13. To update the New Boston Water Resource Management Plan[21] and the Town's Groundwater Conservation District zoning ordinance utilizing new maps and data.

14. To implement a shoreland protection regulation for the Middle Branch and remaining South Branch of the Piscataquog River and implement a riparian buffer study to protect undisturbed stream and river shorelines within New Boston.

15. To utilize New Hampshire Fish & Game Wildlife Habitat Maps to delineate and map significant wildlife corridors.

16. To conduct a Prime Wetlands study in accordance with RSA 482-A:15 as revised and the Administrative Rules of the New Hampshire Department of Environmental Services (see Wt 700 Prime Wetlands laws), and implement the recommendations.

17. To consider implementing a Natural Resources Inventory (NRI) of New Boston's natural resources.[22]

Forest Resource Goal

[21] New Boston Water Resource Management Plan, prepared by Southern New Hampshire Planning Commission for New Boston Planning Board, January 13, 1989.

[22] For information about what a NRI is and what should be included in an inventory see *Natural Resources Inventories, A Guide for New Hampshire Communities and Conservation Groups*, Revised and Updated by UNH Cooperative Extension, 2001.

To sustain the forest resources for the many economic, physical wellness, and emotional well-being benefits they provide to the Townspeople and future residents.

Forest Resource Objectives

1. To encourage the maintenance of large contiguous parcels of forestlands in public and private ownership.

2. To build coalitions between forest landowners and people/groups who desire to use forestland for recreation.

3. To ensure that local land use decision-making authority is based upon adequate natural resource information.

4. To improve landowner understanding of the range of forest management choices and the economic and ecological implications of those decisions.

5. To continue the practice of engaging professional assistance in administering the Timber Tax program.

6. To educate our community about the functions and values of forests and forestry.

7. To continue to manage public lands in accordance with approved management plans based upon adequate natural resource inventories and with accepted best management practices and to promote similar planning for private landowners.

Agricultural Protection Goal

To preserve, promote and expand suitable opportunities for diverse agricultural and related operations and activities.

Agricultural Protection Objectives

1. To ensure that all municipal ordinances protect the right to farm by avoiding requirements that inhibit farming operations, per RSA 672:1, III-b.

2. To develop regulations that ensure the town continues to support farming and agriculture.

3. To investigate legal, financial, and any other approaches to preserve and protect agricultural areas such as adopting a locally administered transfer of development rights program.

4. To conduct an agricultural profile of the community.

5. Promote awareness through public education of agriculture, conservation, forestry, water conservation, etc.

6. To consider establishing an Agriculture Committee to make recommendations to the Town, similar in function to the Forestry Committee.

Earth Products Usage Goal

To identify sand and gravel deposits within the Town and allow for the utilization of said deposits while providing for public safety, the protection of natural resources, the maintenance of aesthetic and visual resources, and the conservation of property values.

Earth Products Usage Objectives:

1. To identify locations and volume of sand and gravel deposits within the community.

2. To determine the status of existing excavations with respect to statutory requirements.

3. To determine a timeline for reclamation of existing and new gravel operations.

4. To determine where future excavations will be allowed to occur, recognizing the location of deposits, the access available to such sites, the character of surrounding land uses, and the proximity to water resources and environmentally sensitive areas.

5. To create a town code enforcement officer whose duties would include the evaluation, regulation and enforcement of permitting use and reclamation of gravel operations.

6. To continue to regulate excavations in accordance with the Town's current ordinances and regulations and to continue to update and amend said ordinances and regulations as needed.

7. Include in the permitting process consideration of visual impacts on view sheds by Earth's products usage.

7.3 Introduction

"Each generation has its own rendezvous with the land, for despite our fee titles and claims of ownership, we are all brief tenants on this planet. By choice, or by default, we will carve out a land legacy for our heirs. We can misuse the land and diminish the usefulness of resources, or we can create a world in which physical affluence and

affluence of the spirit go hand in hand."

Stewart L. Udall, Secretary of the Interior
(1961-1969)

Stewart Udall's philosophy on land and resource use provides useful insight in understanding the ownership, value and importance of natural resources. Our natural resources are unique and require thoughtful care and use. Individuals, corporations, and the community as a whole may all benefit from the wise use of natural resources. However, these benefits are not mutually exclusive and overuse or stripping the land can have detrimental effects for everyone. To avoid these costs and to encourage wise use of the land, reasonable land use regulations are needed. In developing these regulations, a balance between private use and public use of the land must be struck.

7.4 Geology

New Boston lies in the physiographic province known as the New England Upland, characterized by hills and low mountains underlain by schist, granite and gneiss. The landscape features common to New Boston include bedrock knobs, drumlins, eskers, kames, kettle holes, and outwash plains. These features were laid down on the earth's bedrock by periodic glacial activity ending about 10,000 years ago.

Drumlins are one of the most common geologic features in New Boston dating back more than two million years to the beginning of the ice age. The word "drumlin" comes from an Old Irish word-meaning ridge or back. These elongated hogback-shaped hills occur in a northwest-southeast orientation throughout New Boston. Consisting of mostly glacial till, many early settlers in New Boston established their farms on these landforms utilizing them as an agriculture resource.

One of the most visible drumlins in town stands near the Tucker Mill Road-Route 136 intersection. The Dodge Farm uses this drumlin for pasture and growing crops. It is particularly beautiful because it is open and readily visible to travelers on Route 136. Brown's Hill, north of Beard road, is known as Ma-Pa-Dot Orchards, which grows apples and has for many years. The farm now occupied by the Daniels family also has a very visible drumlin located between Bunker Hill and Colburn roads. This drumlin is currently used for pasture and is protected by a conservation easement. Other New Boston drumlin hills are Clark, Cochran, Hooper, Meetinghouse, South and Wilson.

These drumlin features contribute greatly to the rural character and identity of New Boston. It will take thoughtful planning to protect these features in the future. Not only are these hills pleasing to look at and to look out from their summits and slopes, they also attract homebuilders.

Eskers are relatively new geologic features on New Boston's landscape, having been created by streams running through cracks in melting glaciers. This landform is composed of sand and gravel deposited in long, serpentine ridges with near-knife-edge crests and very steep sides. Walking along the top of an esker, as well as the physical

challenge of climbing one is an amazing experience. New Boston had one of the longest esker trains in this part of the state. With minor gaps, it now extends from the Lyndeborough line near the southwest corner of the town, parallel with and adjacent to the Piscataquog River's South Branch, to the intersection of Gregg Mill Road and Route 13 near the Byam farm.

Sand and gravel in eskers are important in construction and, until the accessible material is all trucked away, will continue to contribute importantly to the local economy. The town is fortunate in that not all of the material will be stripped away, because long segments of the esker lie on properties subject to conservation easements. These easements contain clauses that are enforceable by law to prevent removal of sand and gravel. Future generations in New Boston are assured of having the same thrilling experience in walking an esker crest.

In addition to New Boston's eskers there are a number of kettle hole ponds, which can be found within the town. These geologic formations contain unique characteristics of flora, fauna and hydrology and should be documented throughout the town.

By far, the most prominent geologic landform in town is the bedrock knob known as Joe English hill. This knob is visible from many viewpoints both high and low (see photo below). Although bedrock knobs are abundant throughout New Hampshire, Joe English is New Boston's highest and prominent point. Geologists call it a *roche moutonee*, or sheep rock, because of its resemblance to that animal's whole-body profile when grazing. Glacial ice sheets a mile thick, scraped and pushed at the bedrock knob, giving it a smooth, rounded, gradually rising profile on the northwest. The high cliff face on the southeast formed where the ice sheet melted, froze, seized, and cracked house-sized fragments from the rock and carried them slowly away, grinding them into smaller, harder rocks to the south.

View of Joe English Hill in the distance

Travelers approaching New Boston from the south sense the beauty of Joe English hill, particularly in autumn, when its slopes display colorful cloaks. Views from the top

render hikers more breathless than the climbing itself. Hikers also cherish the view to the ledge face from the fields of the Barss Farm on Joe English Road. Often rock climbers scale the ledge face.

Another important feature of the landscape is New Boston's network of rivers and riverine valleys, which are remnants of the last ice age. This network of rivers and streams are part of the Piscataquog River drainage system, which flows a total of 57 miles through seven communities until joining the Merrimack River in Manchester. All three main branches of the Piscataquog River, the North, South and Middle Branch flow through New Boston.[23]

7.5 Topography

New Boston's topography ranges from 300 feet above mean sea level where the Piscataquog River leaves the town in its northeast corner to 1,280 feet on Joe English Hill in the south. The village center elevation is about 400 feet.

There are also several small hills in New Boston ranging from approximately 650 to 1,040 feet in elevation. The hills south of the South Branch are 100 to 300 feet taller than those to the north.

Land with slopes greater than 15 percent (15-foot rise in 100 horizontal feet) and slopes greater than 25 percent is identified on Map 13 Generalized Development Constraints. These slopes are scattered throughout the town and can also be found on small hills and along the South Branch.

While high land is often valued for its scenic views, steep slopes often result in runoff and erosion problems, slumping, expensive site and drainage preparation, and can cause potential weather related problems in reaching home sites in case of fire or medical emergencies. Slopes accordingly affect land use choices. If such areas are developed proper measures need to be taken to control erosion and in designing, installing, and maintaining adequate drainage and wastewater disposal systems.

Development on lands with steep slopes is subject to the Town of New Boston's recently adopted and amended Steep Slopes Conservation District zoning regulations. These regulations require the submittal of a stormwater management plan prior to subdivision approval and/or issuance of a building permit.

7.6 Soils

An understanding of the opportunities and limitations presented by the physical characteristics of soil is an important factor in making wise land use decisions. Soils form through the interaction of five major factors: time, climate, relief, parent material, and biological forces. One of the most important single factors is precipitation. The relative influence of each of these factors determines the kind of soil that can be found throughout New Boston.

[23] More information about the Piscataquog River is available from the *Piscataquog River Management Plan*, which was completed by the Piscataquog River Local Advisory Committee in 2000.

Insert Map 12 Generalized Development Constraints Here

The October 1981 "Soil Survey of Hillsborough County, New Hampshire, Eastern Part" prepared by the U.S. Department of Agriculture, Soil Conservation Service (now known as the Natural Resources Conservation Service) contains some of the most important natural resource data available for New Boston. The soil survey classifies soil types by such factors as compaction, erosion potential, fertility, moisture content, permeability, pH, structure, and texture. It also provides sound, scientific information, that can be used to help evaluate the capability of land to support development, agriculture, wastewater systems, recreation, wildlife, forestry and open space.

Overall, the first 18 inches of topsoil are the most important soils for human activities, including supporting vegetation and agriculture and preventing erosion. As land is used and developed within New Boston, it is important that this good quality topsoil not be stripped or removed during construction.

Working together soils and vegetation also play an important role in stormwater management. From a water quantity standpoint, the loss of good quality topsoil from construction sites significantly increases stormwater runoff quantities. This also increases watering requirements, drawing more water from groundwater aquifers, which reduces groundwater levels and summer base flows to streams. In terms of water quality, the high organic content of soils absorbs many pollutants, a function which is lost when this soil is removed. Pollutant contribution is also increased due to overuse of fertilizers and pesticides to try and compensate for inadequate soil conditions. Landscape design criteria that specify the maximum amount of topsoil and organic content that can be removed from a site should be developed to help minimize the impacts of development.

An overview of New Boston soils is included in the Appendix C of this plan. This overview is intended to help explain the importance of New Boston's soils and to provide a background for better understanding their physical characteristics.

7.7 Wetlands

Wetlands are now defined by the U.S. Army Corps of Engineers and the State Wetlands Bureau as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that, under normal conditions, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands generally include swamps, marshes, bogs, and similar areas and usually occur near ponds, rivers, streams and in isolated upland depressions and around vernal pools. Regardless of size, wetlands are an extremely valuable resource and can:

- Lessen flood damage and store water in high runoffs;
- Filter pollution, using some pollutants as nutrients;
- Settle sediment generated by erosion;
- Recharge groundwater and stream reservoirs;
- Act as wildlife habitats, providing food, cover, breeding and nesting sites; and
- Provide educational and recreational resources.

Wetlands vary in their individual functions and values, including ecological integrity, wildlife habitat, water quality, nutrient attenuation, sediment trapping, flood storage, groundwater recharge, visual/aesthetic quality, etc. These functions and values are determined based upon standards set forth by the New Hampshire Method.[24] The NH Method employs the following 14 functions and values:

- Ecological Integrity – the overall health and function of the wetland ecosystem.
- Wetland Wildlife Habitat – the suitability of the wetland as habitat for those animals typically associated with wetlands and wetland edges.
- Finfish Habitat –the suitability of watercourses, ponds or lakes associated with the wetland for either warm water or cold water fish.
- Educational Potential –the suitability of the wetland as a site for an "outdoor classroom."
- Visual/Aesthetic Quality –the visual and aesthetic quality of the wetland.
- Water Based Recreation – the suitability of the wetland and associated watercourses for non-powered boating, fishing and other similar recreational activities.
- Flood Control Potential – the effectiveness of the wetland in storing floodwaters and reducing downstream flood peaks.
- Ground Water Use Potential – the potential use of the underlying aquifer as a drinking water supply.
- Sediment Trapping – the potential of the wetland to trap sediment in runoff water from surrounding upland.
- Nutrient Attenuation – the potential of the wetland to reduce the impacts of excess nutrients in runoff water on downstream lakes and streams.
- Shoreline Anchoring and Dissipation of Erosive Forces – the effectiveness of the wetland in preventing shoreline erosion.
- Urban Quality of Life – the potential for the wetland to enhance the quality of urban life by providing wildlife habitat and other natural values in an urban setting.
- Historical Site Potential – indicators of use by early settlers.
- Noteworthiness – existence of certain special values such as critical habitat for endangered species, etc.

The soil types most commonly associated with wetlands found in New Boston include: Borohemists, Chocorua Mucky Peat, Greenwood Mucky Peat, Leicester-Walpole Complex, Pipestone, Ridgebury, Saco Variant Silt Loam, Rippowam, Saugatuck, and Scarboro. There are also several rare "Kettle Hole" wetlands located within New Boston. These unique wetlands offer excellent outdoor classroom environments.

The general location of most of the wetlands in New Boston is shown on the following Map 14 Environmentally Sensitive Areas. The identification of these wetlands is based

[24] Ammann, A.P. and Stone, A. Lindley. 1991. Method for the Comparative Evaluation of Nontidal Wetlands in New Hampshire. NHDES-WRD-1991-3. New Hampshire Department of Environmental Services, Concord, NH.

Insert Map 13 Environmentally Sensitive Areas Here

upon National Wetlands Inventory (NWI) data. These wetlands include approximately l,350 acres of poorly drained soils and 1,650 acres of very poorly drained soils.

New Boston's larger wetland complexes can be found:

1) In association with Cochran Hill drainage, which flows southwesterly into the South Branch of the Piscataquog River;
2) Near the 2nd NH Turnpike intersection with Lyndeborough Road;
3) Along Bog Brook;
4) Along the Middle Branch of the Piscataquog River in the northwest corner of New Boston; and
5) Around other surface waters such as Bailey and Beaver Dam ponds.

As a potential development site, wetlands offer no advantages and impose significantly higher economic disadvantages. Disturbing them quite often disrupts the valuable roles they play. Instead, they should be designated for use only with compatible activities, those needing no building, no grading, no dredging, no filling, and no changes to the natural surface. Under New Hampshire law (RSA 482-A:1-482-A:15), a permit is required from the Wetlands Bureau for all construction, dredging, excavation, filling, or removal of soil in or from wetlands. Under the permit review process, the applicant must show that the proposed project, either alone or in conjunction with other human activity, will not impair the effectiveness or the value of the wetland's natural functions.

Recently the New Hampshire Legislature passed Senate Bill 140 which grants contractors the ability to pay the State Department of Environmental Services $65,000 for each acre of wetland they would have to create as part of their wetland permit. These funds will go into a wetland mitigation fund to be used by the Wetlands Bureau to purchase and protect wetlands around the state. Depending upon the effectiveness of this new law, local governments may want to consider similar requirements.

RSA 482-A:15 allows municipalities to designate "prime wetlands" within their community because of their fragility, size, uniqueness, or unspoiled character. At least 10 of the 14 functions and values included in the NH Method must be found for a wetland to be considered for prime designation. Wetlands that have been designated as prime receive greater attention and protection in the wetland permit process. Because of this increased importance, New Boston should officially designate its prime wetlands.

In addition to state and federal regulations, the Town of New Boston's Zoning Ordinance also includes a Wetlands Conservation District designed to protect the community's wetlands from damage by incompatible land uses. Basically this overlay district prohibits the construction of septic systems within 75 feet of very poorly drained soils or within 50 feet of poorly drained soils. The ordinance also requires that the Planning Board issue a Conditional Use Permit for the construction of roads and utilities in wetland areas under certain conditions. This ordinance, however, is now out of date and does not reflect the new wetland definition and regulations that have been adopted by the State Wetlands Bureau. As such, it should be updated. In addition, building setback requirements should be established for both wetlands and vernal pools.

To accomplish this New Boston's vernal pools should be identified, mapped and documented. This will require that a survey similar to a prime wetlands study be funded. This survey should utilize the following guidebook: Identification and Documentation of Vernal Pools in New Hampshire.[25]

7.8 Surface Water Resources

New Boston's surface water resources lie within the Greater Merrimack River Basin. The South and Middle branches of the Piscataquog River flow northeasterly through the New Boston's central and northern sections. Their watersheds contain some of the least-developed land areas located within the southern Merrimack River Basin.

The east central section of New Boston is drained by Bog Brook, which joins the Piscataquog River in Goffstown. The southeastern corner of New Boston is drained by Baboosic Brook, which flows through Amherst and Merrimack before joining the Souhegan River at the Merrimack.

From 1941 to 1978, the U.S. Geological Survey maintained river-flow data records gathered from a gauging station where the Middle and South branches of the Piscataquog River join. Average flow during this period was 131 cubic feet per second (cfs) for the 104 square miles of drainage area in Francestown, Lyndeborough, New Boston, and Weare. The highest flow recorded was 4,100 cfs in a June 1944 flood; lowest, 2.4 cfs in August 1966. The March 1936 flood, thought to have been the greatest flood of record in New Boston, was not measured.

Typically, river flow is at its highest in April, May and June; kayakers and canoeists arrive from miles around, club and college outing clubs and soloists intermingling. Low-water conditions are typically in August, September, and October. This natural cycle can become much more turbulent if the surrounding soils become impermeable.

Development increases the amount of pavement and impermeable surfaces, which causes increased runoff and impacts our streams and rivers (stream flow characteristics). When flows increase to a critical level, banks get undercut, trees fall into the streams, and habitats deteriorate. Stream flows typically reach this critical state when 10 percent of the land in the watershed becomes impermeable. New Boston should investigate and promote Low Impact Development (LID) and Best Management Practices (BMP) measures that will divert runoff from impermeable surfaces into the ground rather than nearby streams. Information about Low Impact Development is included in the Appendix of this plan.

In 1989, the Southern New Hampshire Planning Commission prepared the New Boston Water Resource Management and Protection Plan for the Planning Board as an

[25] Identification and Documentation of Vernal Pools in New Hampshire, Anne Tappan, Editor, New Hampshire Fish and Game Department, Non-game and Endangered Wildlife Program, Concord, NH (1997).

amendment to the May 1987 Town Master Plan.[26] This Water Resources Management Plan is considered a portion of the Town's Master Plan by reference. The aim of the Water Resources Management Plan was two-fold: to identify and evaluate the adequacy of existing and potential water resources to meet the current and future needs of the community, and to identify programs that could improve local water resource management and protection. The plan mentions a proposed Groundwater Resource Conservation District Zoning Ordinance, which was approved at the March 1989 Town Meeting. This ordinance is now part of the Zoning Ordinance of New Boston, however, both the Groundwater Resource Conservation District and the Water Resource Management Plan are in need of updating.

The Water Resources Management Plan rated all major surface waters in the Town of New Boston as Class B, considered to be of high aesthetic value and acceptable for fish habitat, recreation, swimming, and, after suitable treatment, public water supply. State and federal laws prohibit discharge of wastes into such waters. In 1994, largely through the efforts of the Piscataquog Watershed Association (PWA), the legislature protected the river under the River Management and Protection Program. The enabling act, RSA 483, passed in 1988, established a statewide program based on a two-tier approach. The state would designate significant rivers and in-stream values, and local governments would develop and adopt river-corridor management plans to protect shorelines and adjacent lands.

The act provides for the establishment of local advisory committees responsible for river corridor management plans. As a result, the Piscataquog River Local Advisory Committee (PRLAC) was formed in September 1994. The Board of Selectmen from the towns of Deering, Francestown, Goffstown, Lyndeborough, Manchester, New Boston, and Weare all nominated members to the PRLAC. The Commissioner of the Department of Environmental Services also confirmed the nominees. Two members currently represent the Town of New Boston on PRLAC.

As required by state law, in 2000 PRLAC prepared the Piscataquog River Management Plan.[27] The New Boston Planning Board adopted the Piscataquog River Management Plan on June 27, 2000 as an adjunct to the Master Plan. The Piscataquog River Management Plan provides Best Practices for protecting the river as well as information and resources regarding the river and the watershed.

Under the state River Management and Protection Program, segments of the Piscataquog River in New Boston are designated as either a ***Rural River*** or a ***Natural River***.[28] The ***Natural River*** protection classification for example prohibits the construction of new

[26] Water Resources Management and Protection Plan, Town of New Boston, N.H., prepared by Southern New Hampshire Planning Commission for the New Boston Planning Board, January 13, 1989.

[27] Piscataquog River Management Plan, prepared by the Piscataquog River Local Advisory Committee (PRLAC) in 2000. The plan was adopted by the Planning Boards in the towns of Weare, Goffstown, Manchester, New Boston and Deering in 2000.

[28] These river classifications are identified in RSA 483:9. They are important as they include a protected in-stream flow level and a number of land use prohibitions.

dams, the reconstruction of breached dams, and channel alterations. The ***Rural River*** protection classification for example prohibits the construction of new dams, but permits the reconstruction of breached dams and channel alterations under certain conditions. In addition to the River Management and Protection Program, the Comprehensive Shoreland Protection Act (RSA 483-B) establishes a protected shoreline around all great ponds (surface water bodies of ten acres or more in size) and along the banks of all 4th order or greater rivers and streams in the state, for the purpose of maintaining the quality of public waters, and protecting the natural resource values of the shoreline.

An area of 250 feet in depth from the high water mark of these surface waters is subject to a body of regulations concerning land use, removal of vegetation, installation of septic systems, and land subdivision. The New Hampshire Department of Environmental Services is responsible for enforcement of the Shoreland Protection Act, but communities may adopt additional local regulations that are no less stringent than those contained in the statute. One benefit of adopting local regulations is to ensure that anyone working within the protected shoreland will be aware of those regulations that affect the use and development of land adjacent to public waters.

While restricted uses are those considered as potential sources of water pollution, the statutory provisions of particular interest include the requirement for a woodland buffer to be preserved within 150 feet of the high water mark, which is known as the reference line for all great ponds and 4th order streams and rivers. Tree thinning and removal in this area is strictly controlled, and within 50 feet of the reference line, stumps and root systems must be retained even if a tree is cut down. Other provisions contain special standards for the installation of septic systems depending on soil characteristics and proximity to the reference line, and requirements for a minimum distance along the reference line for the establishment of a new lot by means of land subdivision.

Surface waters in New Boston that are subject to the State's Shoreland Protection Act include the South Branch of the Piscataquog River from the confluence with the Middle Branch at Gregg Mill Road and NH Rt. 13 to the confluence with the North Branch, the portion of the Piscataquog River that flows through the northeast corner of Town, and the great ponds listed in Table 7.1 below. The Middle Branch of the Piscataquog River is not subject to the State Shoreland Protection Act requirements.

Table 7.1
Great Ponds in New Boston

Pond Name	Size (ac)
Bailey Pond (NL)	14.2
Beard Pond (NL)	11.9
Beaver Dam Pond	30
Dennison (NL)	12
Dodge Pond (NL)	12.5
Still Pond (NL)	11.4

(NL) refers to Natural Lake
Source: DES List of Public Waters

7.9 Flood Hazard Areas

Most of New Boston's major flooding is caused by exceptionally heavy and long-lasting rain, rain combined with snow melt, and ice jams at bridge abutments and choke points. No flood protection measures exist upstream from the village center on the South Branch.

In 1980 the Federal Emergency Management Agency (FEMA) studied streams and watersheds in New Boston to identify "flood hazard" areas for risk analysis, to set insurance rates, and to help plan and regulate land use in areas at risk. The study looked at topographic, hydrologic, hydraulic and climate data as well as the effects of such structures as roads and bridges on water flow and flooding. The special 100-year flood hazard areas found are shown on the following Map 12 Generalized Development Constraints. These special flood hazard areas have a 1 percent likelihood of flooding in any year.

They generally lie along the Middle and South branches, a short stretch along the North Branch, and some along Bog, Buxton, Lords and Meadow brooks. The widest, most extensive areas of floodplain occur along Buxton Brook in the northwest corner of New Boston and where Cold Spring Brook joins the South Branch in the southwest, an area bounded by Lyndeborough and Butterfield Mill Roads, and the 2nd NH Turnpike. This floodplain also extends in a narrow area through the Town center and beyond following the South Branch. Beard, Beaver Dam, and Dodge ponds are typical isolated ponds subject to flooding.

Information about flood risk potential is essential to protect our flood hazard area from the wrong uses. Unregulated development threatens property owners in the floodplain and downstream by water contamination from flooded septic systems and flood debris. To prevent or minimize flood-caused loss of life and property, New Boston enacted floodplain development regulations in 1990.

The Town has participated in the National Flood Insurance Program on an emergency basis since November 10, 1975; it was converted from the emergency to the regular program on May 19, 1981. Flood Insurance Rate Maps (FIRMs) and the Flood Boundary and Floodway Map, all effective since May 19, 1981, are used to administer floodplain development requirements and for related insurance purposes. These maps are on file in the Town Planning Department. (The Flood Boundary and Floodway Maps were combined with the FIRM in the 2001 update.)

The Flood Insurance Study of November 19, 1980 states on page 6, "The backwater created by the Mill dam at the former Merrimack Farmers Exchange, now a private residence, is the major reason that much of the village area is subject to inundation." The October 1996 flood washed the dam away. With it went the boundaries of the special flood hazard areas along the South Branch as well as the insurance rates based on those boundaries. The Planning Board accordingly asked the Board of Selectmen to discuss reevaluating the limits of the affected flood hazard areas with the state and federal emergency management agencies. The preliminary flood insurance study and flood insurance rate map were delivered to the town in April 1999. The Town received the

finalized maps and study and appropriately updated the Floodplain Development Ordinance in March 2001.

7.10 Ground Water Resources

An aquifer consists of underground soil or rock that groundwater is easily able to move through. Aquifers typically consist of gravel, sand, sandstone or fractured rock. Water from fractured bedrock provides 25 percent of New Hampshire's drinking water and 85 percent of the water for private domestic wells. The majority of residents in the Town of New Boston depend upon aquifers to supply them with drinking water. During years of drought, some wells dry up and homeowners are forced to drill new wells for domestic water.

It is important to protect groundwater within existing or potential public drinking water supply aquifers. Aquifers, like wetlands, serve as a place of storage of water. Development of land that overlies aquifers can have negative, often irreversible impacts. Faulty septic systems or leaking underground storage tanks can contaminate groundwater. Activities such as sand and gravel excavation remove the overburden that can filter out many potential pollutants. Because of the role aquifers play in contributing abundant clean water, as well as their interconnections with wetlands and rivers, land planning in and around these sites should favor low-impact, low-intensity uses that do not have a high degree of probability for groundwater contamination.

In 1995, the U.S. Geological Survey, in cooperation with the New Hampshire Department of Environmental Services published a study on the Geohydrology and Water Quality of Stratified-Drift Aquifers in the Middle Merrimack River Basin, South-Central New Hampshire.[29] This study replaced the 1977 work of those agencies used in the town's 1987 master plan. The stratified-drift aquifer maps prepared as a result of this study also provide the basis upon which the Town of New Boston's Groundwater Resource Conservation District was developed (the stratified drift aquifers in New Boston are shown on Map 14, Environmentally Sensitive Areas).

The distribution and hydraulic characteristics of stratified-drift aquifers generally relate to the original environment in which the sediments were deposited. A variety of "depositional environments" is represented in the stratified drift deposits found in New Boston, including glacial-lake deposits (called lacustrine) and stream deltas. The 1995 USGS study also identified a prominent aquifer associated with the South and Middle branches and describes characteristics at these locations as follows:

> "The upper South Branch aquifer, which begins in Francestown near the headwaters of the branch, extends along the river valley south into Lyndeborough and heads northeast from there into New Boston. The saturated thickness of this aquifer is generally greater than 20 feet, but exceeds 80 feet in the deeper sections near the town line. Part of this aquifer fills the over-deepened channel scoured by glacial ice along the Francestown Turnpike. Saturated thicknesses range from 40 to 60 feet. Test

[29] Geohydrology and Water Quality of Stratified Drift Aquifers in the Middle Merrimack River Basin, South-Central New Hampshire, U.S. Geological Survey and NH DES, Water Resources Division, 1995.

> borings along the turnpike indicate that fine-grained lacustrine deposits are present throughout the entire saturated thickness of the aquifer."
>
> "Similar fine-grained sediment is also present at the southernmost part of the aquifer near the confluence of Cold Brook. To the northeast, test borings and surface observations indicate coarse-grained deposits and saturated thicknesses that exceed 40 feet." (Saturated thickness measures the depth of water in the aquifer from the underlying bedrock to the water surface.)

Transmissivity in the New Boston portion is thought to be probably less than 2,000 sq. ft. a day, but exceeds 1,000 sq. ft. a day, indicating that it has the potential for domestic or small community water supply. (Transmissivity measures the ability of the entire saturated thickness to transmit water.)

> "The Middle Branch aquifer extends northward, up the valley of the Middle Branch from its confluence with the South Branch in New Boston. An extensive delta at the confluence is thought to be coarse-grained and a potentially productive area within the aquifer; however no data are available because of lack of access to the property (the surrounding lands have been owned by the State of New Hampshire since 1993). Saturated thicknesses near the delta may exceed 60 feet. Saturated thicknesses are greater than 20 feet in the middle and upper parts of the stratified drift aquifer and exceed 40 feet in the northern part. The estimated transmissivity for the northern part exceeds 1,000 sq. ft. a day."

The study was done to indicate the potential for locating water in stratified drift aquifers, not to find where dependable water supplies will be found. The January 1989 New Boston Water Resource Management Plan reported that well-log data submitted to the state Water Resources Division showed that 230 wells were reported as being completed between May 1984 and January 1988. Of that total, 227 were for domestic supplies, and 225 were described as bedrock wells. The New Hampshire Department of Environmental Services (NHDES) has noted a total of 1,037 wells. Of these, 399 have been geo-referenced and there are 638 still to be completed.

The purpose of the Water Resource Management Plan is to identify and evaluate the adequacy of existing and potential water resources to meet the current and future needs of the community. The plan also identifies existing and potential threats to water quality, and proposes policies and programs to protect water resources. The New Hampshire Department of Environmental Services and the U.S. Geological Survey has recently completed a multi-year study on the state's sand and gravel aquifers. Additionally, the New Hampshire Bedrock Aquifer Resource Assessment has also recently been completed. Maps of potential yields and reports providing statistical relationships, water-quality data, and an assessment of geophysical techniques were published in 2000 and 2001; the Town has these maps. The goal of the New Hampshire Bedrock Aquifer Resource Assessment was to identify potential high-yielding sources of ground water and analyze the quality from these sources.

Given the availability of the study on stratified-drift and fractured-bedrock aquifers, this information should be employed within New Boston's policies and regulations that relate to aquifers and the protection of the same. On a policy level, the new mapping of the stratified-drift aquifers should also be utilized in any programs of reduced road salting, as well as for land protection efforts wherein conservation easements might be acquired by the Town or the Conservation Commission. Since surface-water treatment costs are rising, demand for ground water from bedrock aquifers is increasing. The need for an up-to-date Water Resource Management Plan is pressing because the water quality from fractured bedrock aquifers can be less than desirable, with high levels of arsenic and radon.

Water quality in fractured bedrock aquifers was evaluated in the New Hampshire Bedrock Aquifer Resource Assessment based on seven variables: pH, hardness, iron, manganese, fluoride, arsenic, and radon. These variables are affected by the underlying bedrock type, since the water is flowing through the fractured bedrock. The underlying bedrock types in the New Boston area are felsic igneous and metasedimentary. The study found that ground-water samples from the metasedimentary group had greater concentrations of total iron and manganese. While these elements are more nuisances than health hazards, both elements exhibited the highest percentage of samples that exceeded the US EPA drinking-water standard concentration levels. The felsic igneous group showed significantly greater concentrations of total fluoride than the other rock groups, again exceeding the US EPA drinking-water standard concentrations. Radon was measured based on potential rather than rock type, with New Boston falling in the medium to high radon potential area.

There are two standards proposed by the US EPA to measure radon in public-supply waters. The first proposes a standard of 4,000 picocuries per liter (pCi/L) under the "multimedia mitigation" program, which considers both air and water sources of radon. Under this standard, higher concentrations in water are allowed if the concentration in the air is low or mitigated to be low. The second standard is followed when multimedia mitigation is not applied and is 300 picocuries per liter for water. Virtually all wells failed to measure under the 300 pCi/L standard. For the multimedia mitigation standard, in the high radon potential areas, 70 percent of domestic wells and 50 percent of public-supply wells failed to meet the 4,000 pCi/L standard. In the medium radon potential areas the percentages of failing wells were 34 and 27 percent, respectively.[30] The State of New Hampshire recommends that homeowners take steps to lower indoor radon-air concentrations when these concentrations equal or exceed 4 pCi/L in the lowest part of the home (New Hampshire Department of Health and Human Services, 2004).

After adopting the January 1989 Water Resource Management Plan, the Town enacted an aquifer protection overlay district, the Groundwater Resource Conservation District, as part of the zoning ordinance. The 1995 USGS and DES study mentioned earlier should be utilized to determine if changes to the Groundwater Resource Conservation Zoning

[30] Moore, R.B., 2004, Quality of water in the fractured-bedrock aquifer of New Hampshire: U.S. Geological Survey Scientific Investigations Report 2004-5093, 30 p. [REPORT AVAILABLE ONLINE at http://pubs.water.usgs.gov/sir2004-5093.]

Ordinance need to be made. As explained earlier in the Wetlands Conservation district discussion, the overlay status imposes added protection controls. Aquifer protection provisions usually allow only low-density uses that offer no threat to the ground-water quality. The potential threats outlined in the Analysis section of the Water Resource Management Plan include:

1. The apparent general lack of knowledge by the public about septic tank and leach field operation and maintenance;
2. 34 active or abandoned underground petroleum-storage tanks in New Boston, 25 of them over or near medium and high-yield aquifers;
3. The state highway road-salt shed sitting over a medium-yield aquifer;
4. The landfill and solid-waste transfer station sited up-grade of surface waters which drain to a potential high-yield aquifer;
5. Salting in the winter on parts of Routes 13 and 114, the Francestown Turnpike, and Lyndeborough, South Hill, Bedford, and Riverdale roads, all over or close to potential medium- or high-yield aquifers; and
6. Significant agricultural activities in the southwest and near the village near and over potential medium- and high-yield aquifers.

The Water Resource Management Plan suggested the following approaches to reduce or remove these threats:

1. Prohibit and remove underground oil and gas tanks near aquifers;
2. Monitor salt-leaching from the state highway shed or remove the shed entirely;
3. Extend the monitoring of leachate from the solid-waste landfill closer to the aquifer;
4. Calibrate salt spreaders more frequently on state and town snowplows; and
5. Minimize runoff from fertilizer, herbicide, and pesticides applied to home gardens and farm cropland.

These recommendations remain valid today. The Town should consider a project to identify the community's future water needs bearing in mind the size and location of potential development. The Town should also consider taking steps to measure the impact of that need on local aquifers.

7.11 Conservation Lands and Regional Environmental Protection Program (REPP)

In 2003, the Town of New Boston voted to divert a total of 60 percent of the land use change tax revenue it receives from the conversion of lands in current use assessment. Ten percent of these funds goes to support the activities of the Conservation Commission and 50 percent goes to support the Conservation Fund, which is administered by the Conservation Commission.

The Town's Conservation Funds are used for a variety of conservation purposes, including purchasing conservation land and conservation easements. In the future, as the value and cost of land continues to increase, the Town of New Boston should consider increasing the amount of revenue that goes to the Conservation Fund from the land use

change tax from 60 percent to 100 percent. This would be in line with many other communities within the region who are doing the same.

Map 14 showing all the existing conservation and public lands in New Boston is provided on the following page. It is important that is information be made available to the public and to communicate existing conservation and public lands to existing and new residents. This should include maps of new conservation lands and trails. Maps of existing conservation lands and trails are available at the Town Hall.

In the future, as the Town considers protecting other properties in New Boston for open space or conservation purposes, it would be helpful to utilize the information that has been developed under the Regional Environmental Planning Program (REPP). REPP is a partnership between the NH Department of Environmental Services and the nine regional planning commissions across the State. The program began in 1997 and since that time many environmental planning projects have been completed and many more are planned.

A primary means of accomplishing resource protection is through the nomination of sites or areas containing locally significant resources to the Regional Environmental Protection Program (REPP). New Boston's participation in this program is described in detail herein.

In the spring of 1998, the New Hampshire Legislature created the Land & Community Heritage Commission (LCHC), which was charged with determining the feasibility of a new public-private partnership to conserve New Hampshire's priority natural, cultural, and historical resources. The LCHC was formed in response to public interest establishing a program similar to the former Land Conservation Investment Program (LCIP), which was responsible for the protection of more than 100,000 acres of open space in New Hampshire between 1987 and 1993.

At the time of the formation of the LCHC, the New Hampshire Department of Environmental Services (NHDES) contracted with the state's nine regional planning commissions to conduct a public outreach and information gathering effort relative to resources deemed to be important to local officials and organizations. This program, known as the Regional Environmental Protection Program (REPP), resulted in a preliminary catalog of locally important resources.

As a member of the Southern New Hampshire Planning Commission, the Town of New Boston participated in the REPP by soliciting the recommendations of the Planning Board, Conservation Commission, Forestry Committee, and the FLESA Committee. These local organizations submitted a list of nine sites to the REPP (See Appendix D). These sites, together with other public and protected properties, form the core elements of an open space network within the Town, which is based on the preservation of natural, cultural, and historical resources. As resource inventories become more refined, and specified sites are actually preserved, additional sites may be identified as being valuable for preservation.

Insert Map 14 Conservation and Public Lands

7.12 Local Resource Protection Priorities (LRPP)

During 1997 and 1998, SNHPC, along with the other regional planning commissions, collaborated with representatives of its member communities to identify and map unprotected natural and cultural resources they would be interested in preserving. This data was then reviewed and updated again in 2004, features that had since been preserved were removed from the list, new priorities were added, and some old ones were removed (See Appendix E). A visual representation of all LRPP properties in New Boston is available on Map 17 Historic Resources, which is included in the next chapter.

The Town's Boards and Commissions should seriously consider the REPP priority list and investigate applying for matching funds to help preserve and protect those resources in New Boston that have been identified as important to the history, character and future of the Town.

7.13 Wildlife Habitat

Wildlife contributes to the joy of living and to the quality of life enjoyed by New Boston's citizens. Wildlife can only be sustained if connected natural systems retain their integrity. Natural systems consist of core areas, connectivity, and buffer zones. Wildlife must have spaces within which to travel, to seek genetic interchange, to find cover and food. It is important to identify and prioritize these areas before the land is subdivided and developed. The New Hampshire Fish and Game Department has recently completed an analysis of significant wildlife throughout the State and has identified and mapped critical wildlife habitat areas. The information will eventually be transmitted to every municipality in the State and included in this plan.

Because of the usefulness of this information at this time, the New Hampshire Fish and Game Wildlife Habitat Features Map has been included in this master plan for reference purposes only (see following Map 15). It is recommended that the Conservation Commission and Planning Board use this map as a guide in their analysis of future development proposals, subdivisions and site plans. In that way, areas identified on the map as significant wildlife habitat can be avoided or protected. In addition, this map provides useful information to the town for future open space and land conservation purposes.

7.14 Invasive Plant Species

It is important that New Boston residents are educated about the impacts of invasive plants and that action is taken to control and/or eradicate invasive species as indicated in NH Agr. 3802.01, Table 3800 and Agr. 3802.02 and as authorized by RSA 430:55 and RSA 432.[31] It has been shown that non-native invasive plant species can cause habitat loss and threaten the integrity of natural communities. This is occurring along the

[31] NH Agr. 3802.01, Table 3800.1 indicates the current list of NH Prohibited Invasive Species on which Purple Loosestrife, Japanese Knotweed, Multiflora Rose, Common Buckthorn, Tatarian Honeysuckle, Black Swallow-wort, Autumn Olive, and Oriental Bittersweet are included. It is this list that contains invasive plants that are currently being monitored and prohibited from sale. As of January 1, 2007, Agr. 3802.02 will prohibit the collection, transportation, selling, distribution, propagation and transplantation of Norway maple, Japanese barberry, and Burning Bush.

Insert Map 15 Wildlife Habitat Map

Piscataquog River and in many of New Boston's wetlands, forests, and farmlands. Native plants are rapidly being displaced, reducing vegetation strata, and altering ecological processes. Much of the diversity of native plants in New Boston is decreasing as non-native Purple Loosestrife, Japanese Knotweed, Norway maple, Burning Bush, and Japanese Barberry; among others vie for space.

Mammals, fish, reptiles, birds, and amphibians are also experiencing habitat and feeding grounds loss. There are many causes for this influx of non-native species. Disturbed soils and transportation of non-local fill into new housing developments bring plants and seeds that were not originally here to vulnerable sites. Highway crews, in their roadside mowing, inadvertently move plants and seeds along our roads. Uninformed plant sellers, landscapers, and homeowners typically plant invasive because they are "pretty" in the landscape, not realizing that birds and other animals unwittingly transport the seeds.

7.15 Pollution

Pollution is generally not a problem yet in New Boston. However, the population of the town is rapidly increasing and the potential for light, noise and litter pollution is growing. In order to mitigate the negative impacts of pollution now and in the future, the town should consider adopting ordinances that limit or prohibit light pollution, noise pollution and littering. The attractiveness of open spaces and natural settings is greatly diminished by the presence of pollutants that can be seen, smelled and heard. The wonder and awe of a starry sky can be diminished by bright lights here on the ground. Litter can easily overpower the quaint feel of a small town. The tranquility of one's own home can be erased by excessively loud noise.

Outdoor lighting design standards that limit the amount of light that can cross a property boundary or adversely affect roadway visibility can be readily incorporated into the Town's Non-Residential Site Plan Review Regulations.[32] In addition, streetlights can be limited in number and constructed using bulbs and shields that keep the light focused only on the areas needing to be lit. Illumination of commercial buildings and signs should be limited to appropriate security and advertising needs. Commercial lighting should not impact adjacent properties or detract from the town' rural character.

The Town of New Boston should also consider adopting a noise pollution ordinance that limits the amount of noise that can cross a property boundary or emanate from a vehicle. Special permits with expiration dates should be obtained to exceed that threshold for more than one day. Exceptions should be made for legal, personal or business activities such as firearms practice, fireworks and the annual ride of the train whistle.

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[32] The International Dark-Sky Association (IDA), a non-profit organization teaches how to preserve the night sky through fact sheets, law references, pictures and web resources. See http://www.darksky.org/.

The Town of New Boston should also consider adopting a littering ordinance that prohibits the depositing of trash on roadways and public places except in designated containers. It should also prohibit the storage or transport of trash or other materials in such a manner that they are easily blown or carried by water to adjacent properties.
Each of these ordinances should come with significant fines to encourage compliance, but a limited number of warnings or small fines for first and second offenses. The town should purchase detection and measurement equipment for the local police department.

7.16 Forest Resources

New Boston is fortunate to have a large forested area: more than 200 parcels of forested land over 25 acres each, a large inventory of forest parcels protected by easement, and many owners committed to long-term management. However, this number was over 400 parcels less than 20 years ago.

Forests provide functions and generate values enjoyed locally and extending globally. Many of these functions and values include:

1. Aesthetic benefits: natural beauty, attracting wildlife, framing and displaying views, screening objectionable views.
2. Engineering benefits: air conditioning, noise control, glare and reflection reduction, erosion control, and water quality protection.
3. Climate control benefits: wind control, solar radiation control, moderation of air temperature and ground temperature.
4. Ecological benefits: stormwater runoff control, uptake of phosphorous and other chemicals harmful to water quality, soil building, wildlife habitat, carbon sequestering, air quality enhancement.
5. Economic benefits: personal income, multiplier effect on regional economy, local yield tax revenue, generates higher real estate tax revenue, avoids expenditures on community services.
6. Health reasons: preferred land base for recreation, source of spiritual connection, and place for intellectual and emotional satisfaction.

One of the challenges to sustaining forests is that fragmentation through subdivision may leave many trees but no forest. In 2001, the Selectmen appointed a committee to study the forest resources in Town and to prepare a report. The study is titled “Forestland Evaluation and Site Assessment” (FLESA). The results of this study should be used to guide open space land acquisition, forest conservation zoning district expansion, and in influencing developers to use cluster residential development strategies on parcels with high ranking FLESA scores.

In meeting the challenges facing the forests, assessment of the resource is the first step. Use of the Forest Lands Evaluation and Site Assessment (FLESA) program should be used to make appropriate decisions to balance land development and preservation of open space areas to benefit the community both economically and ecologically.

The program known as "Keeping Track" should be encouraged to gain insights into wildlife habits and population.[33] "Keeping Track" is a non-profit organization designed to inspire community participation in the long-term stewardship of wildlife habitat. The organization teaches adults and children to observe, interpret, record and monitor evidence of wildlife habitat in their communities. The potential of local decisions to impact the ability to practice forestry and sustain healthy forests is not widely recognized. Proposed policies affecting land use should be reviewed for comment by the Conservation Commission, Forestry Committee, as well as the landowning public early in the planning stage. The Town should also promote awareness of RSA 672:I-III-c, the "Right to Practice Forestry Law."

Many New Boston residents generally do not have a connection to the land that former residents had up until the mid 1960's. Annual seminars targeting planning board, zoning board, selectmen and other town officials, elected and appointed, should be considered. The conservation commission and forestry committee in collaboration with school officials should plan to encourage "Project Learning Tree" training or similar programs for teachers and to encourage use of town forests as outdoor classrooms for nature study.[34]

In order to build coalitions between forest landowners and individuals or groups who desire to use forestland for recreation, the Town of New Boston should increase public awareness of Town Forests, New Hampshire's landowner liability law as it relates to landowners and recreational users of private lands (RSA 212:34 and 508:14), and build understanding of responsible use of private land by recreational users.

In addition, New Boston should continue the practice of engaging professional assistance in administering the Timber Tax program. In 2005, upon recommendation of the Forestry Committee, a professional forester was contracted by the selectmen to assist the tax assessors in ensuring that fair and appropriate timber tax assessment is applied to all timber harvests and that forest harvesting laws are enforced. Initial indications are that this assistance is helpful to the Town.

7.17 Town Forests

RSA 31:110 provides authority for the legislative body of any city or town to establish by purchase, lease, grant, tax collector's deed, transfer, bequest or other device, a city or town forest. The main purpose as authorized by RSA 31:111 is to encourage the proper management of timber, firewood and other natural resources through planting, timber stand improvement, thinning, harvesting, reforestation, and other multiple use programs consistent with the forest management program, any deed restrictions and any pertinent local ordinances or regulations.

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[33] The Piscataquog Watershed Assoc has adopted the "Keeping Track" program founded by Susan Morse of Huntington, VT (For more information about this program see http://www.keepingtrack.org/)

[34] "Project Learning Tree" is an award-winning environmental education program designed for teachers and other educators, parents and community leaders working with youth from preschool to 12 grade. See http://www.plt.org/ for more information.

The first Town Forest in New Boston was established in July 1928. Other parcels have been acquired over the years until the Town of New Boston now owns seven parcels totaling 494 acres (see Table 7.2 below).

Table 7.2
Town Forest Lands

Map	Lot	Lot Name	Acreage
2	118	Colby	10
7	70	Lydia Dodge	244
2	144	Follansbee	11
3	44	Johnson	32
2	115	Siemeze	85
7	22	Sherburne	60
7	74-1	O'Rourke	52
		Total	494

Source: Town of New Boston

The Board of Selectmen established New Boston's first Forestry Committee in the 1950's. On October 27, 1956, the Board of Selectmen, the Forestry Committee, and the Piscataquog Chapter of the Future Farmers of America (FFA) met at the high school to sign an agreement allowing 40 acres of the Lydia Dodge Lot to be used by the FFA for forestry management training.

On April 1, 1990, the Forestry Committee began producing the first Forest Management Plans for New Boston's Town Forests. These documents include inventories and provide information about the various species and estimates of board feet and cords on each Town Forest lot.

In 1996, and upon vote of the Town, the Board of Selectmen appointed an official Forestry Committee to manage the Town Forests. The responsibilities and duties of a Forestry Committee are provided under RSA 31:112. One of the primary responsibilities is the management of Town Forests. Since 1996, the Forestry Committee has had management plans prepared by the University of New Hampshire Department of Natural Resources for all the Town Forests and maintains annual updates to these plans as recommended practices are implemented. Today, all the Town Forests in New Boston have management plans in place except for the Johnson lot.

Similarly, the Conservation Commission has had management plans prepared for the town owned lands for which it is responsible. Both the Forestry Committee and the Conservation Commission should consider ways to encourage private owners of large wooded parcels to complete long-range management plans and commit to implementation of the plans while respecting the rights of property owners.

7.18 Private Forestry

There are about 21,000 acres of private forestland located in New Boston. This represents approximately 71 percent of the land area of the town. The average annual timber growth, if harvested, would yield $4.00 to $5.00 per acre in yield tax revenue. This tax revenue has a net present value of about $467,000 at a rate of 6 percent. The working forests in New Boston contain approximately 15,970 acres (see FLESA study report). The average timber volume per acre is 5,100 board feet. Assuming an average standing timber value of $125, the total worth calculates to $10,180,000 (which is roughly 4 percent of the total assessed valuation of real estate in town).

The annual timber harvest in 2005 was about 1.8 million board feet. Comparing this rate of harvest with a total estimated annual growth of about 2,443,410 board feet, the growth to harvest ratio is 1.35 to 1. This is a sustainable situation.

To save open space for forestry in the future, the Town of New Boston should promote and encourage the gift or purchase of conservation easements. Conservation easements provide private landowner's a practical option to protect their land while retaining ownership. There are also numerous tax benefits, which make conservation easements attractive for the landowner. In addition, in the future the Town should consider expanding the Forestry and Conservation District and encourage increased density or clustering in other districts.

In 2000, the Town voted to establish the Forestry and Conservation District. This zoning district is designed to protect large areas of undeveloped land for forests and wildlife habitat. The larger lot sizes within the Forestry and Conservation District, or in any district, can help to retain rural character and protect the natural environment. Cluster housing can also be used to protect wildlife habitat and existing recreational trail corridors by providing open space.

New Boston should make landowners aware of the "right to practice forestry" statute (RSA 672: 1-Ill-c) and the protection offered by the "landowner liability law" (RSA 212:34 and 508:14). Additionally, landowners need to be made aware of and promote the use of "best management practices" in harvesting. There are also many other federal and state programs available to promote private forestry, including the Certified Tree Farm program.

The owners of large private forests should also be encouraged to allow their lands to be open to the public for recreation including hiking, bicycle riding, horseback riding, cross-country skiing, swimming, fishing and wildlife viewing. The Town should recognize that larger parcel sizes are correlated with increasing public use of private land and should keep parcels large or encourage clustering of new houses in higher-density in order to keep larger open spaces. Volunteer trail maintenance and trash pickup on forested land should be encouraged in return for continued public access. New Boston should encourage landowner commitment to long-range forest management.

7.19 Farmland

Farming as a way of life is rapidly disappearing not only in New Boston, but also all over Southern New Hampshire and New England. Shrinking farm revenues and growing demand for farmland for other uses have led to abandonment of farms and its conversion to other uses. That being said, there is a growing demand for locally produced farm products. Hobby farms and community supported agriculture ventures are becoming more common. Every effort should be made to encourage such ventures, and preservation of existing farmland for future uses should be strongly encouraged.

Farmland is often the most sought-after land and generally presents few limitations to development. The Natural Resources Conservation Service (NRCS) recognizes two categories of valuable farmland soils in New Hampshire.

"Prime farmland" is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. Prime farmland soils are those soils that have the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming techniques.

"Additional farmland of statewide importance" consists of soils that are considered important to agriculture within the state and are capable of producing fair-to-good crop yields when managed properly. Due to a variety of factors such as water capacity, pH, water table, permeability, slope, etc. these soils are not considered as valuable as prime farmland.

The NRCS has mapped eight soil series in New Boston of "prime" or "statewide importance." They are Agawam fine sandy loam (B slopes), Belgrade silt loam (A slopes), Canton fine sandy loam (B and C slopes), Montauk fine sandy loam (B and C slopes), Pootatuck fine loam (A and B slopes), and Woodbridge loam (A and B slopes). The locations of these soils are shown on the Environmentally Sensitive Areas Map (Map 14).

Based on calculations using these classifications, New Boston has approximately 1,000 acres of prime farmland and approximately 1,600 additional farmland acres of statewide importance. Not all of New Boston's estimated 1,200 acres in crops, pastures, and managed woodlands are considered soils of prime or statewide importance. Nor is all of the agricultural land designated "prime" or "statewide importance" necessarily in current agricultural use now. Some may exist as woodland or may have been developed for housing or other uses.

Significant concentrations of prime farmland soils are found throughout New Boston, particularly along the westerly side of Thornton Road; between Clark Hill and Pine Roads; near Wilson Hill Road, northerly of Bedford Road; near Hooper Hill Road, Bradford Lane, and Joe English Road; in the Laurel Lane and McCurdy Road area; and on Chestnut Hill Road near the Amherst line.

The primary techniques available for protecting agricultural land at the local level include the purchase and/or donation of development rights through conservation or agricultural easements. In addition, communities can develop policy guidelines to preserve agricultural land. Participation by farmers is essential, since they would be most directly affected by such policies. As one of its policies, the Town of New Boston might consider designating prime farmland soils actually being used now for farming for protection. Farmers owning and working such areas could be encouraged to take part in the State's Acquisition of Agricultural Land Rights program or a similar, town-developed and supported program with fairer payments to the owners than are now being offered. Or, if the state continues to fail to pay competitive prices, the town could elect to carry the entire burden itself.

The Acquisition of Agricultural Land Rights program is described in New Hampshire RSA Chapter 432:18 through 432:31-a. It allows a farmer who agrees to keep her/his land in agricultural use to receive a one-time payment from the state. The statute provides that the payment be limited to the difference between the land's fair market value and its fair market value when restricted to agricultural purposes. Although no funds are available to support the program now, it is still in effect and the Town of New Boston might, given the lack of state funding, act on its own under RSA 432:25 to purchase agricultural land development rights. The state has provided a resource kit for planners, "Preserving Rural Character through Agriculture." which is available in the New Boston Planning Department.

According to NH RSA 672:1, III-b, the significant contributions to New Hampshire's quality of life by agriculture should not be "…unreasonably limited by use of municipal planning and zoning powers…". Town officials should keep this in mind when preparing or updating ordinances and regulations.

7.20 Earth Products Usage

In 1989, the state revised RSA 674:2, Master Plan Purpose and Description, to require that each municipal master plan identify known sources of sand and gravel to meet future needs. Some of New Boston's most probable sources are shown on the following map. Currently, there are a total of 25 locations where excavation permits have been issued for sand and gravel operations in New Boston. The locations of these sites are shown on Map 1 Existing Land use and the following Map 16 Sand and Gravel Deposits/Excavations.

Sand and gravel suitable for commercial use with minimal processing are assessed on the following properties: gradation of grain sizes, thickness of the deposit, and content of rock fragments. A soil rated by NRCS as a "probable" source of sand and/or gravel has a layer of clean sand or gravel or a layer of sand or gravel that is no more than 12 percent silty fines. The layer must be at least three feet deep and contain no more than 50 percent by weight of large stones. Each soil is evaluated to a depth of five or six feet. Soils not meeting these standards are rated as improbable sources. Coarse fragments of soft bedrock, such as shale or siltstone, are not considered useful.

The NRCS has identified approximately 1,400 acres in New Boston as the most probable sources of sand and approximately 2,660 acres as probable gravel sources. Because many of these sites are located close to river courses and near or above stratified drift aquifers, digging to the water table and careless disposal of oil, fuel, filters and containers should be forbidden, and careful, thoughtful site restoration practices should be implemented.

Suggested below are recommendations for improving the Town's excavation approvals:

1. Determine the status of existing excavations with respect to statutory requirements.
2. Employ the erosion and sedimentation control provisions of the subdivision regulations during sand and gravel excavation permit applications.
3. Require reclamation plans of all new gravel permit applications and existing permits as applicable.
4. Evaluate the adequacy of current earth removal regulations and update and amend said regulations as needed.
5. Project where future excavations should or should not occur.
6. Produce an accurate estimate of the material remaining and the likely date of exhaustion of the non-renewable resources given the current rate of excavation.
7. Prepare appropriate recommendations to ensure continued availability of these resources.
8. Calculate the Town's future need for sand and gravel to maintain the infrastructure of the Town and determine how best to supply this need, and,
9. Limit excavation or require extra safeguards when in close proximity to water resources and environmentally sensitive areas

Insert Map 16 Sand and Gravel Deposits/Excavations

8 HISTORIC PRESERVATION

8.1 Community Survey Results

In the summer of 2005, a New Boston Master Plan Questionnaire was sent to all property owners and out of town property owners in New Boston. The survey was also left in various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to historic preservation in New Boston:

Please rate the following:

	Most Important	2	3	Least Important	No Response
Maintaining traditional village district	**285**	153	42	15	8
Preservation of natural/historic resources	**280**	143	49	12	19

Do you feel it is important to create and maintain a sustainable Village District for New Boston while preserving the historic character?

Yes	No	No response
394	79	29

If Yes, what actions should be taken? (Check all that apply)

Create Village Zoning District	121
Encourage elderly housing in village	119
Study/consider municipal sewer/water	115
Study/build pedestrian improvements	247
None of the above	5

How important do you feel are the preservation or implementation of the following items?

	Most Important	2	3	Least Important	No Response
Historic character of village	**334**	100	32	14	23
Stone walls along public roadways	**204**	133	92	49	25
Limiting further paving of gravel roadways	106	81	130	**136**	50
Barns	**167**	121	124	59	32
Historic schoolhouses	**141**	133	122	68	39

8.2 Goals and Objectives

Historical and Cultural Preservation Goal

To preserve, protect, and enhance the Town's unique historical buildings, sites, features and cultural heritage.

Preservation Objectives:

1. To consider the formation of an historic district commission or heritage commission to consider the criteria and process for identifying historical and cultural resources.

2. To continue to update an inventory of historic resources.

3. To consider the establishment of an historic district.

4. To promote awareness of the significance and value of historical and cultural resources and the protection of the same.

5. To install marker signs identifying historical resources.

The Community Survey results clearly illustrate the importance of historic and cultural preservation to New Boston residents. However, amid the challenges of current and projected population and economic growth trends in the area, as well as the difficulty of securing the necessary funds to preserve properties, widespread preservation efforts are rare. The objectives above provide a realistic approach to future successful preservation efforts in New Boston.

The establishment of an historic district commission or heritage commission is an important first step in the preservation process. Once established, these commissions can serve as advisors for planning boards and can help facilitate the listing of properties on various national and state registers. These registers raise awareness of the importance and value of historic preservation and can foster civic pride.

New Hampshire RSA 673:4 and 673:4a allow communities to form historic district commissions (HDC) and heritage commissions (HC). Once formed, communities can vote to allow historic district commissions to take on the duties and responsibilities of a heritage commission and vice versa. Historic district commissions are concerned solely with historic districts. HDCs can regulate the appearance within a designated historic district by reviewing building permits, site plan review applications, and demolition requests. Heritage commissions are non-regulatory bodies that focus on the entire town. The purpose of heritage commissions is to identify, preserve, protect, and enhance the historic character of the municipality. Considered the town's 'preservation experts,' heritage commissions are empowered to do surveys and advise planning boards on preservation issues.

Another important step is the compilation of an historic resources survey and inventory. The New Boston Master Plan has begun this important process, but there is still much work to be done. The Master Plan identifies a number of structures and sites in New Boston which are of historical significance to the Town. These historic and cultural resources are not only important to the Town's heritage, but contribute to its unique character. Additionally, a preliminary listing of historic barns (those older than 75 years) has also been undertaken. There are over 120 old barns, sugarhouses and chicken houses in New Boston. The New Hampshire Division of Historical Resources (NHDHR), in conjunction with the New Hampshire Historic Agricultural Structures Advisory Committee, began a barn survey project in 1999. The survey attempts to catalog all existing barn structures in the state to assist in grant determinations and offer technical assistance. New Boston should work with NHDHR to make sure the Town's historic barns are on the state inventory and complete its own town inventory.[35]

8.3 Preliminary Identification of Historic Resources

The first step in an historic preservation effort is to conduct an historic and cultural resources inventory to identify all structures and sites of potential value (see Map 17 Historic Resources on the following page). Generally, the inventory should include the location of each structure, its age and architectural style, photographs and any unusual characteristics. The results of such a survey might suggest that one or more sites of high historical interest may be eligible for listing on the State or National Register of Historic Places.

Far from providing a comprehensive survey of New Boston's historical resources, this portion of the Master Plan is intended to serve as a first step in the identification, documentation, and ultimate protection of these important resources. New Boston has a wealth of older homes. According to the 2000 Census, approximately 23 percent of the homes were reported to be fifty or more years of age. Twenty percent of homes in New Boston were built prior to 1939. They serve as a constant reminder of the Town's rich past and they are an integral part of the Town's unique character.

The Piscataquog River, the railroad and the Whipple Farms were among the forces that helped to shape New Boston's history. Many of the buildings and sites forged by these influences remain in existence today. For example, numerous mill sites are found along the South Branch Piscataquog River. Heading downstream from the Lyndeborough town line, these include Butterfield or Gage Mill; the paper mill; Muzzey Mill; Sutherland Mill; Neville's grist mill and ax or "sharps" factory; the grist mill which later became the Merrimack Farmers' Exchange; the Abraham Wason barrelhead or "kit" factory; the McLane door, box and piano frame factory; and the Richards saw mill below Howe Bridge.

[35] More information on the New Hampshire Division of Historic Resources Barn Survey Project can be found at: http://www.nh.gov/nhdhr/barnsurveyproject.html.

Insert Map 17 Historic Resources here

Mills located on the Middle Branch of the Piscataquog River (heading upstream from its confluence with the South Branch) include the match factory; two mills operated at one time by the Hadley family (one of which is still standing); Andrews' chair and doorknob factory; and two mill sites at the Epiphany Monastery (one a saw mill and the other the Morgan furniture factory).

Some of the buildings associated with the Whipple Farms and the railroad still stand today as well. These include the Lang Station, a privately built railroad waiting station. This stone structure, built in the late 1800s or early 1900s, is located near the intersection of Gregg Mill Road and NH Route 13 (River Road). Many of the Whipple Farm buildings remain near the junction of NH Routes 77 and 136. They include the farmhouse, the superintendent's house, the cement barn, and the cider mill with its original press. The creamery still stands behind Dodge's Store, in the center of Town.

Although half of the village center was lost to fire in 1887, New Boston's present village center contains a number of buildings of historic significance. Dodge's Store (site of the first library, Valley Hall, and post offices at different times), the old firehouse (now housing the Historical Society), the Town Hall, and the Community Church, were built in 1888, after the fire. The railroad depot, built in the late 1800s, later became the community house, was the police station for 13 years and is now a residence. On the north side of the Piscataquog River are quite a number of older structures which escaped the 1887 fire. These include one, built in the early 1800s, which served as a grocery store, a post office, a stage stop, and now as a residence. Across the street, on the river's edge, was the New Boston Tavern, the stable of which now serves as a bank.

Many of New Boston's older homes are located on Meetinghouse Hill, which at one time was the Town's center. This area includes the sites of the first two churches in Town, the Priest Bradford House, which dates to the mid-1700s and the main cemetery, which dates back to the same period. Jenness Place, built in the mid-1700s and believed by many to be the oldest standing house in New Boston, is located at the intersection of Joe English Road and Meadow Road. Across the road from Jenness Place is a former district school, now a private dwelling. Perhaps the oldest former schoolhouse in Town, it was built in the late 1800s or early 1900s.

Just south of Town, on NH Route 13, is the site of the Neville axe or "sharps" factory, which later housed the Gravity Research Center founded by the Boston and New Boston financier and philanthropist Roger Babson. A restaurant and tavern occupies the site today. Further on is Greystone Cottage, which was, for a time in the late 1800s, the studio of Edward Hill, the famous New Hampshire landscape artist. A summary of many of New Boston’s barns, old mills and stone walls is provided in Appendix F.

8.4 Protection of Historic Resources

8.4.1 *Historic District Overlay Zoning*

Historic zoning or historic district overlay zoning is a tool for preservation. Typically, this type of zoning is a layer that is applied over the existing zoning regulations in

designated historic districts. The heritage commission, historic district commission or a design review board reviews building permits and demolition requests within the district. In some cases, the heritage commission or historic district commission may only review demolition requests, while an independent design review board reviews permits. In either case, the efforts of the preservation groups and the zoning and planning boards need to be coordinated for best results, otherwise, problems can arise. For instance, zoning in historic districts could be incompatible with current uses, or there could be density, lot size, or off-street parking issues. Most importantly, the Town decides how involved the preservation organization will be and what aspects of design review will fall under its purview. The historical society and historic district commission or heritage commission may work together to perform research and to prepare the content of the historic district ordinance. The historic district commission or heritage commission is responsible for administering the ordinance and regulations within the district.

To determine the need for historic zoning overlays or revised zoning ordinances, New Boston should first map its historic districts, properties and landmarks. Secondly, either the historic district commission or the heritage commission should assess the viability as well as the significance of each historic district before considering establishing a zoning ordinance. Additionally, a key component is property owners' willingness to participate in the district. Typically, implementation of a public survey and assessment of public participation is a necessary part of the process.

Additionally, historic zoning ordinances may allow historic properties special exceptions for uses typically not permitted by the general zoning ordinance. One example is to allow historic residences, which can be large and expensive to maintain, to be used as office space or multi-family housing. Another consideration is the use of existing mill buildings for residential or commercial purposes. By providing for mixed uses in historical districts, communities can facilitate revitalization.

Another zoning tool is transfer of development rights (TDR). A TDR ordinance permits the development rights for low-density historic buildings to be sold or transferred to another location where higher-density development is allowed or desired. Density bonuses can also be utilized to preserve open space with archeological potential.

Conditional zoning can also be used as a preservation tool in which zoning change requests are granted only if certain conditions are met. The conditions might be preservation of open space or built structures, among others. These zoning tools require a willingness to cooperate between zoning boards and preservation groups and knowledge of zoning regulations, potential historic and archeological areas in need of preservation, and development objectives.

8.4.2 *Historic Preservation Easements*

Historic preservation easements allow a property owner to grant a portion of the rights of the property to a group that commits to preservation. The property owner retains the right to sell the property, however all subsequent property owners forever relinquish the development, demolition, alteration, or other rights waived as part of the easement.

Historic preservation is not inexpensive. Easements provide property owners with a mutually beneficial alternative. Not only does the property owner retain ownership, along with any potential financial benefits, but there is also the possibility of a federal tax deduction. These benefits are balanced by the knowledge that the owner has contributed to the preservation of an historically or culturally significant place.

Owners can claim a federal tax deduction of the value of the easement up to 30 percent of their adjusted gross income. The balance of the easement tax benefit can be carried forward up to five years. The value of the easement, as determined by an appraiser, is typically the difference between the appraised fair market value of the property and the value with the easement in effect.

Properties must meet certain qualifications set by the IRS in order to qualify for tax benefits. To be eligible, properties must be on the National Register of Historic Places or be located within an historic district and certified by the U.S. Department of the Interior as historically significant to the district.[36] Certification must come prior to the easement, or before the owner files a tax return for the year the easement was granted. Additionally, qualified properties must be accessible to the public. Depending on the nature of the site, this could mean as few as a couple of hours or days per year, or even the ability to view the site from a distance.

Historic preservation easements generally prohibit the destruction or alteration of the property without review and approval by the easement holder. Development and subdivision restrictions are also common. Additionally, some easements require the owner to maintain or restore the property to certain conditions. Historic preservation easements provide ownership of the property, thereby alleviating the financial burden of maintaining the property alone.

As of 2003, there were four organizations that administered historic preservation easements in New Hampshire. These included: the New Hampshire Division of Historical Resources, the Manchester Historic Association, the New Hampshire Land & Community Heritage Investment Program (LCHIP), and the New Hampshire Preservation Alliance.[37]

8.4.3 *Discretionary Preservation Easements*

New Hampshire state law also provides for the preservation of barns through RSA 79-D. This law allows municipalities to provide tax breaks to barn owners that meet certain requirements. The preservation of the barns must provide a public benefit and the owners must agree to maintain the barn or structures throughout the minimum 10-year discretionary preservation easement. The barn owners are granted tax relief, enabling them to repair and maintain their barns. The easement also provides that the town will not increase the assessment after the repair work has been completed and tax relief can be

[36] For a description of historically important land areas, as defined by the IRS visit www.cr.nps.gov/hps/tps/easement.htm

[37] For the full report, listing organizations by state visit http://www.cr.nps.gov/hps/tps/tax/download/easements.pdf

equivalent to a 25 to 75 percent reduction of the structure's full-assessed value. To qualify as an "historic agricultural structure," the structures, including the land they were built on must be or have been used for agricultural purposes and also be at least 75 years old.[38] As of 2005, four barns in New Boston have obtained discretionary preservation easements. Three of the barns are eligible for a 50 percent assessment reduction and one is eligible for a 75 percent assessment reduction. The barns are located at One Bradford Lane, 15 Baker Lane, 201 Old Coach Road, and 280 Colburn Road.

8.4.4 *Other Sources of Guidance and Funding*

The New Hampshire Preservation Alliance recently received a grant which will allow them to offer preservation field services to help communities advance historic preservation projects. Two seasoned preservation experts will be available to provide information, advice and small grants, offer workshops, and establish new networks of citizen/advocates for historic preservation. Additionally, the New Hampshire Preservation Alliance website provides a listing of available grants to communities and organizations interested in preservation.[39] Some of the grants that might be suited to New Boston include:

- **Hart Family Fund for Small Towns:** The purpose of the Hart Family Fund for Small Towns is to assist small town preservation and revitalization initiatives around the country, with a focus on towns with populations of 5,000 or less.
- **New Hampshire's Transportation Enhancement Act:** Provides funds and selects projects that preserve the historic culture or enhance the operation of the transportation system. Project categories include: facilities, safety and educational activities for bicyclists and pedestrians; acquisition of easements for scenic or historic sites; scenic or historic highway programs (including tourist and welcome centers); landscaping, beautification, historic preservation; rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals); preservation of abandoned railway corridors (including conversion for use as bike and pedestrian paths); control and removal of outdoor advertising; archeological planning and research; environmental mitigation to address highway created water pollution and establishing transportation museums.
- **Public Service of New Hampshire:** Community development grants available in the PSNH service territory on a rolling basis throughout the year for historic preservation and more.
- **Preservation Project Development Grants:** The New Hampshire Preservation Alliance provides small matching grants to assist non-profit organizations in hiring a consultant to assist with preservation planning.

[38] For more information on New Hampshire's barn preservation efforts, visit the New Hampshire Division of Historical Resources at www.nh.gov/nhdhr

[39] For a list of grants available visit the NH Preservation Alliance at http://www.nhpreservation.org/html/grants/htm

8.4.5 *Designating an Historic District*

When the 1963 session of the New Hampshire General Court established New Hampshire's historic district enabling legislation, it said that "The preservation of structures and places of historic and architectural value is hereby declared to be a public purpose." The legislature went on to say that "The heritage of the municipality will be safeguarded by:

I. Preserving districts in the municipality which reflect elements of its cultural, social, economic, political and architectural history;

II. Conserving property values in such districts;

III. Fostering civic beauty;

IV. Strengthening the local economy; and

V. Promoting the use of historic districts for the education, pleasure, and welfare of the citizens of the community." [RSA 31:89-a (1963), now RSA 674:45]

In 1993, these purposes were broadened to include cultural resources and community history, and to recognize multiple districts. As the New Hampshire Division of Historical Resources notes,

> "It's clear that the legislators didn't intend historic districts to be isolated shrines forever frozen in white paint. Instead, they deliberately described historic districts as centers of civic and economic activity. Historic districting is a strategy that WORKS -- literally and figuratively -- to preserve both the character and the tax base of a community."

Historic districts are designed to showcase the cultural, social, economic, political, and architectural history of an area, while conserving property values, fostering civic beauty, and strengthening the local economy.[40] Historic district commissions can assist the planning board with both technical and historic advice. The citizens of New Boston would formulate the powers and responsibilities of the historic district commission. Thus, citizens should not fear that an historic district commission would impose severe rules or restrictions. The only requirement that historic district commissions must complete is a local historic resources inventory. Communities that have established historic district or heritage commissions, an historic district ordinance, and have completed the local historic resources survey can then apply for Certified Local Government status.

The designation as a Certified Local Government (CLG) can provide additional preservation funding and resource opportunities for New Boston. In order to be granted CLG status, municipalities must meet specific state and federal standards. These

[40] New Hampshire Division of Historical Resources, "What are Historic Districts Good for, Anyway?" 2003.

standards pertain to the entire community, not only an historic district. Once certified, communities are members of a network made up of the National Division of Historic Resources and other CLGs. Additionally, there are federal matching grant funding opportunities reserved exclusively for CLGs.

8.5 Types of Preservation

There are a number of state and federal programs that provide designations which can assist in preservation efforts. Such designations can also make New Boston more attractive to businesses and tourists, providing an economic boost to the area. It is important to note that a designation does not guarantee permanent preservation of a site, however, most citizens and communities would prefer to maintain the designation rather than allow such a site to be lost.

8.5.1 *Local Resource Protection Priorities*

The New Hampshire Department of Environmental Services during 1998 and 1999 contracted SNHPC, along with the other regional planning commissions, to collaborate with representatives of the member communities to identify and map Local Resource Protection Priorities (LRPP). This data was then reviewed and updated in 2004 (See Appendix E for the 1998 data and Appendix F for the 2004 data). These mapped priorities are unprotected natural and cultural resources that communities would be interested in preserving. The project's intent was to gain an understanding of local priorities for two purposes – to assist the LCHIP program to identify projects to fund and to assist planners, regional planning commissions, and state agencies in their planning efforts. New Boston identified nine properties on the original 1998 list it would like to see protected. The 2004 update included eight additional properties. None of the original properties have been preserved. Additionally, since the 2004 additions, some of the lots that were identified as protection priorities have been developed, indicating a pressing need for action. Rather than continue to add to this list, New Boston should utilize some of the resources outlined in this chapter to facilitate preservation efforts.

8.5.2 *The National Register of Historic Places*

When individuals think about historic designations, the National Register of Historic Places is perhaps the most commonly known. The National Register is maintained by the National Park Service and contains nearly 79,000 listings. Listings on the National Register are eligible for special federal tax benefits, preservation assistance, and acknowledgement that the property has national, state or community significance. Properties must meet certain criteria to be considered for designation. Essentially, properties are generally at least 50 years old and are associated with significant events or people in the past, or exhibit distinctive characteristics of an historical time period or architectural style. National Register designation does not, however, equal preservation. Properties on the list can be privately owned, and the designation does not limit the owner's right to change or demolish the property. The National Park Service has a website that guides communities through the application process; communities considering nominating properties for National Register designation should consult this

document.[41] Currently there are no properties in New Boston listed on the National Register.

8.5.3 *The New Hampshire State Register of Historic Places*

Properties listed on the State Register of Historic Places are eligible for the same types of benefits as the National Register, only the source of the funding, planning assistance, and tax benefits are at the state level, rather than federal. The criteria for properties to be considered for inclusion on the State Register are also similar to the National Register. In general, properties must be at least 50 years old and must tell an historically significant story. Eligible property types include buildings; districts; sites – such as parade grounds or a village green; landscapes; structures – such as stonewalls or bridges; and objects. The New Hampshire Division of Historical Resources offers guidance to communities that desire to apply to the State Register.[42] Currently there are no properties in New Boston listed on the State Register.

8.5.4 *National Historic Landmarks*

National Historic Landmarks are places that have meaning for all Americans. They are designated by the Secretary of the Interior and nominated by the National Park Service. Landmarks can be buildings, districts (villages or communities), sites without built structures, uninhabited structures, or objects. There are fewer than 2,500 designated landmarks nationally and only about 20-25 new landmarks are designated per year. To be designated a National Historic Landmark, areas must be associated with historic events, people or ideals, be prime examples of design or construction, or exhibit a way of life.

8.5.5 *State Historic Markers Program*

The New Hampshire Historical Markers Program commemorates New Hampshire's places, people, or events of historical significance. The New Hampshire Division of Historic Resources, with the help of the New Hampshire Department of Transportation, administers the program. Marker requests can be made by communities, organizations, or individuals and must be accompanied by accurate documentation including footnotes, a bibliography, copies of supporting research and a petition signed by at least twenty citizens. There is one state historic marker in New Boston for the home of the Molly Stark Cannon.[43]

8.5.6 *Historic Landscapes*

The National Historic Landscape Initiative is not a list of designated properties, but rather a resource for the preservation of landscapes. It provides publications, workshops, technical assistance and national policy direction. Landscapes are an essential part of how New Englanders identify with the region and the image of the New England village would be incomplete without landscapes. By protecting landscapes, communities can provide enjoyment for their citizens and an improved quality of life. Landscapes are more than just open space; they include residential sidewalks, lawns, and trees, as well as

[41] Visit http://www.cr.nps.gov/nr/listing.htm
[42] Visit www.nhdr.gov for more information.
[43] Visit www.state.nh.us/markers/ for the complete list of state markers.

agricultural fields, forests, and stone walls. Currently no towns in the region have preserved historic landscapes, but historic landscape preservation is a method that can work well in concert with existing open space conservation efforts in the region.

8.5.7 *Scenic Byways Program*

A scenic byway is a designation that showcases the state's most beautiful vistas and landscapes.[44] There are no state scenic byways in New Boston, however, there are certainly many stretches of roads that might qualify. Furthermore, New Hampshire RSAs 231:157 and 231:158 allow towns to make scenic road designations. Any town road, other than a Class I or II highway, can be designated a scenic road by petition of 10 or more people. A local scenic road designation can be useful for the protection of natural landscapes, since roadway repair or maintenance cannot disturb or harm trees or stone walls within the Town's right-of-way without written consent of the responsible board. New Boston currently has seven locally designated scenic roads. These are identified in the Transportation chapter.

The Town could explore the possibility of having some of the locally designated roads upgraded to state scenic byways. Generally, state scenic byways must be longer stretches of road; loops or significant lengths of roadway are preferred. Additionally, state scenic byways should have a variety of visitor facilities and amenities along their lengths. These types of amenities might not need to be extravagant; scenic overlooks, a craft/gift shop and quaint restaurant offerings might suffice. A byway assessment sheet, which can be used to evaluate a local scenic road's potential for state designation is provided in Appendix G. Also included in Appendix G is a NH Scenic and Cultural Byway Application Form, which describes the process to apply for state designation. Once a scenic byway receives state designation, the byway is eligible to seek federal funds (SAFETEA) through the National Scenic Byways Program. Currently approximately $500,000 is available each year in New Hampshire to fund Scenic Byway related projects. Examples include interpretive centers, scenic overlooks, safety improvements, and marketing material.

8.5.8 *Archaeological sites and programs*

There has been human habitation in New Hampshire for at least the past 10,000 years. Our knowledge of settlements and archaeological sites is limited, however, because most of the State has not been fully explored. This explains why a map of archaeological sites cannot be produced. The New Hampshire State Conservation and Rescue Archaeology Program (NH SCRAP) is hesitant to describe known archaeological sites on a map because people have a tendency to assume that blank space on a map equates to the absence of archaeological significance. This is not the case in New Hampshire; the blank space simply means it has not been explored yet.

There are a few generalizations about potential archeological sites that communities can use to determine preservation efforts. Generally, SCRAP has found that sites tend to be within 300 feet of rivers or other water bodies. Areas near a waterfall or rapids pose a

[44] For the locations of the National and State scenic byways in New Hampshire, visit www.byways.org/browse/states/NH/.

good chance of hosting former settlements. Certain soil types, such as well-drained alluvial soils are also indicators. Settlements have also been known to occur on high ground near wetlands or swamps because these areas provided good resources for hunters and gatherers. A slope grade of 20 percent or greater could rule out a site, since steep slopes are not attractive for habitation. These environmental guidelines are imprecise indicators of settlement because the environmental landscape of the State has changed many times over the last 10,000 years. Unfortunately, there is no predictable model to determine settlement areas in New Hampshire.

8.5.9 *Design Guidelines*

Design guidelines outline locally acceptable site and architectural design and can be formulated to identify desirable community characteristics. They focus on the aesthetic and promote new development and substantial improvements to existing structures that is harmonious with the surrounding area, town center, or historic district. The guidelines can specify locally desired architectural styles, construction materials, building scale, window and door design, sign size and design, awnings and canopies, lighting fixtures, landscaping, fencing, and screening methods. These guidelines are typically incorporated within the Town's Non-Residential Site Plan Review or Land Use Development Regulations. These regulations can range from providing a general clause requiring the preservation and protection of historic features to location-specific guidelines for new development.

8.6 Conclusion

To transition from the goal of preservation to the execution of preservation, New Boston should organize an Historic District Commission or an Heritage Commission. Once established, these organizations can utilize the tools for preservation, such as the historic resources survey and inventory, historic district overlay zoning, various preservation easements, grants and loans.

Towns that have created an Historic District Commission or Heritage Commission, and have utilized the various preservation tools, may find it easier to apply for the various state and federal designations outlined previously in the types of preservation. By garnering various designations, New Boston can showcase its unique heritage. Such designations can provide education – not only to visitors of the sites, but also to the citizens on the value of preservation, thereby encouraging future preservation efforts. Historic and cultural resources can attract visitors, which can add dollars to the community's economy.

Despite the advantages of designation, it is important to realize that sites are still vulnerable to loss. Timing is critical in terms of historic preservation. Rapid increases in population and the accompanying developmental pressures on historic and cultural resources continue to put properties and districts at risk. New Boston should educate itself and its citizenry about the advantages and disadvantages of historic preservation and implement the types that are most suited to the Town's historic resources.

9 FUTURE LAND USE

9.1 Community Survey Results

In the summer of 2005, a Master Plan Questionnaire was sent to all property owners andc out of town property owners in New Boston. The survey was also left in various locations for residents who did not receive one in the mail. A total of 1,969 surveys were distributed with 503 responses, for a response rate of 25.5 percent. The following questions and responses on the survey relate to future land use in New Boston.

Where should future residential development occur?

	Encourage	Discourage	No response
Anywhere in town	60	**351**	92
On present farmlands	70	**356**	**77**
In presently forested area	81	**342**	181
On back lots	**249**	174	80
Along rivers	30	**410**	63
Along existing paved roadways	**365**	78	60
Along existing gravel roadways	**265**	173	65
In the village district	132	**309**	62

Do you feel it is important to create and maintain a sustainable Village District for New Boston while preserving the historic character?

Yes	No	No response
394	79	29

Should clustering of dwellings on smaller individual lots in order to leave more open space be encouraged? (i.e. allowing smaller house lots with common open land)

Strongly Agree	Agree	Doesn't Matter	Disagree	Strongly Disagree	No Response
102	**134**	38	100	108	21

Should every subdivision over a certain size be required to provide open space?

Yes	No	No response
411	69	23

Should mixed-use development be permitted in New Boston? (Single-family, multi-family and commercial could be included in a single development)

Yes	No	No response	Not sure
179	**292**	33	4

Do you want the town to encourage industrial development?

Yes	No	No response	Not Sure
125	**338**	36	4

Do you want the town to encourage commercial development?

Yes	No	No response	Not Sure
210	**254**	34	5

What type of businesses would you like to see in New Boston? Check all that applies.

Industrial	135
Small retail	**375**
Large retail	19
Restaurant/food service	**371**
Medical	**304**
Professional office	287
Services	219
Recreation	103

The results of the Community Survey indicate that New Boston residents are concerned about the overall growth and development of the town. While there is no consensus about where future residential growth should occur, it is clear that a majority of the respondents felt that residential growth should be allowed on backlots and along paved and unpaved roads in town. This essentially means most of New Boston. Additionally, most respondents felt that residential development should not occur on present farmlands, in forested areas, along rivers, and within the Village district.

In addition, the majority of respondents overwhelming felt that it was important to create and sustain a Village district for New Boston while preserving the historic character of the village. While there was a somewhat mixed response as more respondents supported rather than opposed the concept of clustering dwellings on smaller lot sizes in order to leave more open space, a majority of respondents supported the notion that every

subdivision of a certain size should be required to have open space. On the other hand, respondents felt mixed-use development should not be allowed to occur within New Boston.

Regarding the question of whether to encourage industrial or commercial development in New Boston, the majority of the respondents indicated no. However, there were also a large number of respondents who indicated that they would like to see the town encourage commercial development. Small retail, restaurant/food service and medical were the top three businesses that received the highest support.

9.2 Introduction

This chapter contains recommendations for various types and locations of desired land use activities in New Boston. It also depicts the proposed location, extent and intensity of future land use as shown on the Future Land Use Map (see Map 18 on page 196 of this chapter). This map is intended to serve as a guide for directing the future growth and development of the Town.

The basis for the future land use recommendations in this chapter reflects the public input received at the April 15, 2006 Master Plan Public Forum as well as the vision statement and goals and objectives of this plan (see Vision Statement, Goals and Objectives beginning on page viii). The recommendations also recognize the type and distribution of existing land use activities; opportunities for and constraints imposed on, future development by the community's natural features; population and housing projections; and the opinions of those who participated in New Boston Speaks in 2004 and those who responded to the master plan survey questionnaire distributed during the summer of 2005.

This chapter also includes a summary of the results of a Build-Out Analysis, which was prepared for the Town of New Boston in 2004 by the Southern New Hampshire Planning Commission, and a summary of New Boston's 1987 Master Plan Future Land Use recommendations.

9.3 Town of New Boston Build-Out Analysis

9.3.1 Overview

A Build-Out Analysis is a useful tool to reveal potential development possibilities. It is performed to identify the "buildable" lands within a community, thereby providing a good idea of the potential for future growth. The calculations are driven by the community's existing land development regulations and the supply of "buildable" land.

The New Boston Build Out Analysis was performed with the use of GIS and it involved multiple steps using available data from the GRANIT database at the Complex Systems Research Center, University of New Hampshire. A total of six maps were created to illustrate the analysis in a graphic format. Some of these maps have been incorporated into this plan. Calculations were performed to determine the total number of acres, lots,

dwellings and population that could be expected if all the identified "buildable" lands in the community were developed as set forth by the Town's existing zoning regulations. Copies of the maps and a summary of the methodology as well as the assumptions of the analysis are provided within the Appendix F of this plan.

9.3.2 Build Out Results

The Build Out Analysis conducted for New Boston began by first identifying all the existing developed lands as well as all the potential "buildable" lands located in New Boston. This was accomplished at the parcel level by utilizing the town's 2003 tax assessor records and creating a composite base map. A number of natural constraints, such as wetlands, steep slopes (>25 percent) and special flood hazard areas were then overlaid on top of the base map to identify all the "buildable" lands.

The Build Out Analysis resulted in the following findings. First, a total of 16,940 acres of vacant undeveloped land was found to exist in New Boston at the time of the analysis and out of this total, 357 lots or 9,150 acres of "buildable" land was identified. This represents 14.3 square miles or roughly 33 percent of the Town of New Boston (the town consists of a total of 43.2 square miles). Although these "buildable" acres may not be available now for development they have the potential to be built upon at some point in the future and as such they represent the supply of land available for future construction in New Boston. The total amount of developed, protected and vacant lands existing in New Boston as determined in the Build Out Analysis is provided in Table 9.1 below.

Table 9.1
Developed, Protected and Vacant Lands
New Boston, NH

	Acres	Square Miles	Percent of Total Land Area
Developed Lands	4,468	6.98	16%
Protected Lands	5,104	7.98	18%
Roads and Water	1,136	1.78	4%
Vacant Land	16,940	26.47	61%
TOTAL LAND AREA	27,648	43.2	100%

Source: SNHPC

The next step in the Build Out Analysis required an evaluation of all the identified "Buildable" lands based upon the Town's existing zoning and subdivision regulations. To accomplish this, the town was divided into six geographical sections. With the use of GIS, zoning information was added to the base map and all the "Buildable" lands and parcels were then categorized by zone, acreage and geographic section.

Utilizing the minimum road frontage, dimensional and lot size requirements of each of the Town's zoning districts, the "Buildable" lands were then evaluated on a parcel by parcel basis to determine how the property could be developed and/or subdivided in the

future and what the potential future number of dwelling units could be on each property. Several assumptions were made to complete this evaluation (see Appendix F).
The results of the analysis found that out of the 357 lots or 9,150 acres of "buildable" land, a total of 3,952 new residential lots or dwelling units could be developed or subdivided at some point in the future.

Assuming no major changes to the Town's zoning or subdivision regulations in the future, at full built out, 3,952 new dwelling units has the potential to add 11,460 new people to the Town of New Boston (3,952 units multiplied by 2.90, the average persons per household for New Boston based upon the 2000 US Census).

When these numbers are added to the Town's existing 1,462 total number of households and existing population of 4,138 people (2000 US Census), New Boston has a potential build-out (existing and projected) of:

Future Number of Dwellings:
5,414
Future Population:
15,598

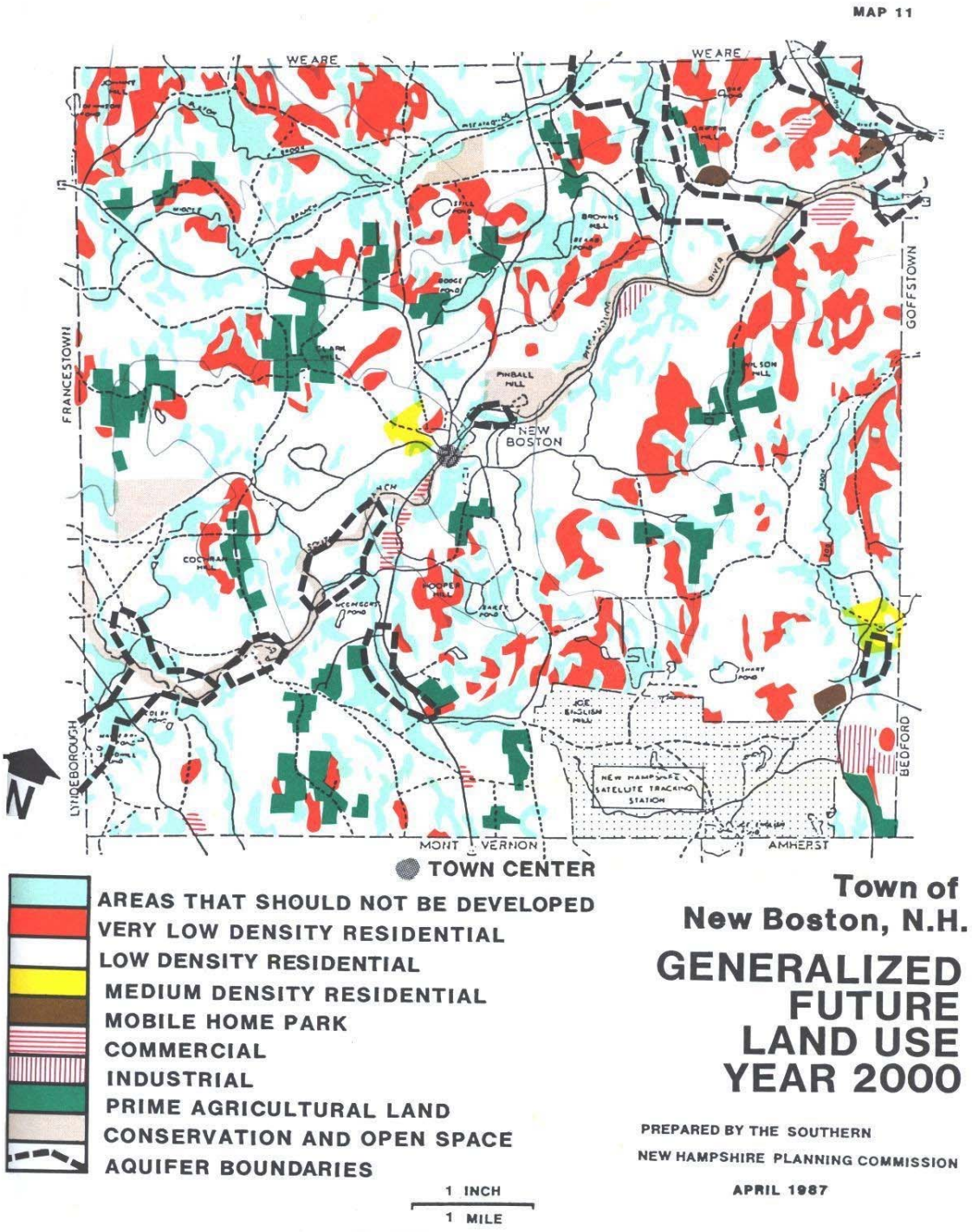
9.4 Previous Land Use Recommendations

In developing future land use recommendations, it is always helpful to go back and review previous Town Master Plans. New Boston's 1987 Master Plan is helpful as it contains a number of land use recommendations as well as a Generalized Future Land Use Year 2000 Map. This map identified areas in New Boston that should not be developed, including prime agricultural land, conservation and open space. It also identified preferred areas for very low, low and medium density residential, mobile home parks, commercial and industrial development (see map on following page).

While these recommendations are now almost 20 years old they provide a framework upon which New Boston's future land use activities can be based, particularly with respect to the overall goals and objectives of this plan, the public feedback and results obtained from New Boston Speaks, the community master plan survey, the April 15, 2006 Public Forum, and the updated facts and trends identified in this plan.

A summary of the New Boston's 1987 Master Plan future land use recommendations follow. After each set of recommendations are the current facts and trends which apply today.

Figure 9.1
Generalized Future Land Use Year 2000



9.4.1 Residential Development

1987 Master Plan

The overall goal of the 1987 Master Plan was preserving the rural character of New Boston. In support of that goal, it was recommended that a majority of the future residential development of New Boston should be in the form of low-density single-family.

In addition, where soil characteristics are most favorable, two locations were suggested for medium-density residential uses. These areas are located within the Bedford Road-Christie Road intersection area in the southeastern part of Town, and within the triangular area between Clark Hill and Briar Hill roads just westerly of the Village. The plan suggested that a greater variety in housing choice and the development of more affordable housing opportunities, particularly for elderly and low- and moderate-income households could be allowed within these areas. The plan also suggested that development options, with appropriate density incentives, could help to achieve the plan's housing objectives and at the same time preserve open space and protect natural areas without causing significant increases in the Town's overall population density.

The 1987 plan also recommended numerous areas throughout the community for very low residential densities (i.e. larger minimum lot sizes) primarily due to the presence of steeper slopes (in the range of 15 to 25 percent), slow soil permeability and shallow depth to bedrock which limit the proper operation of septic systems.

Current Facts and Trends

The overall goal of New Boston residents 20 years later has not changed. Overwhelming, New Boston residents want to maintain the open, rural character of New Boston and protect the traditional village district. In addition, most residents do not want residential development occurring haphazardly in Town. While they support backlot development and residential development on paved and unpaved roads, most residents do not want it occurring within the village district, on existing farmland or along the banks of the Town's rivers.

Generally what these responses indicate is that residential development in New Boston needs to be planned and that it needs to be located in places where it has the least environmental impact. This can be accomplished through a combination of different approaches. First, with cluster development that can hide development behind existing wooded areas and protect open space. This requires large wooded buffers around the exterior of the development and mandatory open space requirements. Currently, cluster development is only allowed in the Town's Residential & Agricultural District. Perhaps performance zoning could be implemented which would allow an alternative to 2 acre minimum lot sizes. Performance zoning is based on the premise that higher density could be allowed where access, soils, slopes, wetlands, and other criteria demonstrate the ability to support such development. In addition, more incentives could be added to encourage or make this form of subdivision a more desired form of residential development.

In addition, very few residents as indicated in the 2005 survey want to see the Town's minimum residential lot size of 2 acres and 200-foot frontage change in any way. In order to reduce sprawl, an alternative such as higher density, open space development should be offered and encouraged.

9.4.2 Commercial Development

1987 Master Plan

The 1987 Master Plan noted that the availability of retail services in the community was limited, but as the Town's population increased, additional retail facilities would be needed for the convenience of New Boston's residents.

As is frequently the case, many rural villages are generally designated as the focal points for community-serving commercial activities, often because they already possess the basic retail and service facilities needed by the town's residents. Thus, it is often within such villages that towns encourage commercial growth.

However, the 1987 Master Plan recommended that the present character of New Boston Village not be compromised by the expansion of commercial activities. The plan also recommended that future commercial growth in the Town should not be allowed to occur in a strip development pattern.

Recognizing that the projected population growth will create demands for additional community-serving retail and personal service activities, the Planning Board recommended several sites for the development of future commercial services. The larger of these are on the southerly side of River Road (NH Rt. 13) near the Goffstown town line and on the westerly side of Mont Vernon Road (NH Rt. 13) south of the village. Other smaller sites are strategically located to benefit residents of diverse geographical areas of Town while assuring that these locations have reasonably good exposure to traffic volumes that will help contribute to continued success.

Historical traffic count data along the state highways in New Boston was utilized in the 1987 plan in identifying the locations for future commercial development. River Road and Mont Vernon Road locations were selected as having the greatest potential for development based on traffic considerations.

Current Facts and Trends

Twenty years later, while there is still a clear majority of residents who do not want to see the Town encourage commercial development, there are significantly more residents today who do. The top three businesses that received the greatest support in the 2005 survey include small retail, restaurant/food service, and medical. Other acceptable uses include professional office and services. These uses and other uses are currently permitted in the Town's existing Commercial District which is located both within the Village district as well as within the areas along River Road and Mont Vernon Road that were identified for future commercial development within the 1987 plan.

Because the Town's existing Commercial Districts are only 9 percent developed or built out, it is recommended that future commercial development in New Boston be limited to the Town's existing commercial zoning districts and new small scale planned commercial areas only. The Planning Board should also consider illustrating areas for future commercial growth and development on the Future Land Use Map. If this is not possible, the Planning Board should conduct a detailed study of the entire Town before haphazardly recommending zoning changes on specific parcels or lots which would detract from the Future Land Use Map and the overall growth and development objectives of this plan.

9.4.3 Industrial Development

1987 Master Plan

It was noted in the 1987 plan for a variety of reasons, including: 1) the Townspeople's desire that New Boston be predominantly a rural residential and agricultural community; 2) the Town's geographic location; 3) the lack of reasonably direct access to the region's major highways; and 4) perhaps also due to the lack of municipal water and sewer services that New Boston has not and most likely will not experience significant industrial development.

Despite these circumstances, it was the Planning Board's determination in the 1987 plan that carefully selected light industrial-type land uses could help to improve the local tax base and take some of the burden off the homeowner and provide more local employment opportunities.

As noted in the 1987 plan, it was the Board's concern that such uses should be developed without the Town having to provide municipally financed infrastructure improvements. Additionally, the type of activities to be allowed should have minimal adverse impacts on the natural environment and the rural character of the community and their presence should not disrupt the serenity of the Town. Also, the selected sites should be located such that they have a realistic potential for development.

Considering these parameters, two possible sites were suggested for designation of future industrial use. The area on the southerly side of River Road, midway between the Village and the Goffstown line, and the area on Chestnut Hill Road opposite the Satellite Tracking Station. Each site has suitable acreage to allow light industrial development on a scale that could meet New Boston's foreseeable needs and expectations; however, the types of uses that would be permitted should be carefully screened for possible adverse effects that they might have on the local environment both natural and physical. From a location standpoint the 1987 plan noted that the Chestnut Hill Road site might be more appealing to an enterprise which requires somewhat better access to the region's major highways than what is available from the River Road site.

Current Facts and Trends

Again, 20 years later, local attitudes and perceptions regarding industrial development have changed little. A clear majority of New Boston residents today do not want the Town to encourage industrial development.

As noted in the Existing Land Use chapter, there is at this time only one Industrial District in New Boston consisting of 6 acres. However, there is also a number of existing industrial land use activities occurring on 59 acres of land scattered throughout New Boston based upon the Town's Assessor Records (see Map 1 Existing Land Use). Some of these industrial lands are non-conforming and occur with the Residential & Agriculture District.

It is suggested that the Planning Board conduct a study of these existing industrial uses as well as the 59 acres and determine if any of this land should be rezoned. In addition, New Boston has a significant amount of land consisting of former sand and gravel operations. These pits could be reclaimed and considered for future development depending upon their location and suitability.

9.4.4 Town Center

1987 Master Plan

From a functional standpoint, the 1987 plan recommended that the village of New Boston continue to function as the town center because it is the focal point of the community's governmental, cultural and social activities. However, the plan made it clear that this recommendation should not be construed to preclude future consideration for the development of new public facilities such as a fire substation or an educational facility elsewhere in Town, should such need be necessary or advisable to properly serve the Town's growing population.

Current Facts and Trends

Today, there is no real change in how New Boston residents feel about the village center. Most residents support the goal of creating and maintaining a sustainable village district for New Boston while preserving its historic character.

This can be accomplished in a number of ways. First, zoning within the village center could remain as is, which consists of a combination of the existing Commercial and Residential & Agricultural Districts. Existing and future uses in the village center would continue to be governed by these zoning districts. The 3-acre minimum lot size requirement in the Commercial District would for all practical purposes continue to preclude new infill development from occurring as most of the lots and parcels located within the village center are less than 3 acres in size. However, at the same time, this zoning arrangement does not preclude a developer from buying up adjoining properties to form a 3-acre redevelopment site. Nor does it preclude a property owner from making exterior changes or alterations to an existing building or site, which could jeopardize the historic character of the village.

A second option exists for the Town. This option involves developing a new Village District zone that would encourage smart growth principles and establish architectural standards designed to maintain and preserve the historic village character. Many towns throughout the region and state have adopted Village zoning districts for these purposes. It is suggested that the experiences of these communities be studied by New Boston officials before a developer of a chain or "big box" franchise considers New Boston's Village center a golden opportunity.

9.4.5 Conservation and Open Space

1987 Master Plan

The 1987 plan pointed out that while the vast majority of New Boston's land area is undeveloped this fact provides an erroneous impression that the Town is well endowed with expansive "open space" and "recreational" areas. In reality, the 1987 plan reported that New Boston at that time only had approximately 500 acres of land dedicated to open space and recreational use – land that could be considered to be reasonably well protected from future conversion to other uses. The larger elements of these lands include the Lydia Dodge lot (244 acres in the west-central part of town), the Siemeze lot (89 acres in the north-central part of town), the Hillsborough County 4-H Foundation Center (100 acres on the northeastern fringe of the Village), and the former Boston and Maine Railroad right-of-way bordering the South Branch of the Piscataquog River between the village and Goffstown. With the possible exception of the U.S. Military Satellite Tracking Station, which comprises 1,750 acres of largely undeveloped land, the remaining undeveloped acreage is in private ownership and, therefore, must be considered as being potentially developable.

Also the plan noted that within these privately owned lands are a variety of environmentally sensitive areas consisting of steep slopes, wetlands, floodplains, and aquifer recharge areas that should not be developed, as well as valuable scenic vistas and land controlling access to important surface waters. Recognizing that it is almost impractical to accurately and effectively map all these areas, the 1987 plan recommended that the more significant areas that are currently protected and the additional corridor referenced in the 1982 document "A Management Plan for the South Branch of the Piscataquog River" be identified and shown on the Generalized Future Land Use Year 2000 Map as conservation and open space.

Current Facts and Trends

Today there are roughly 5,104 acres of protected lands within New Boston. This represents almost 18 percent of the Town. These lands consist of all public lands, town forests and conservation lands held in various forms of public and private ownership (refer to Map 14 Conservation and Public Lands). Because these lands are protected from development in one form or another, it is recommended that this data layer be shown as is on the Future Land Use Map.

The Town of New Boston currently does not have an Open Space Plan. An Open Space Plan would provide the community, as well as the Conservation Commission, Forestry Committee and Planning Board, with a planning tool and guide for future open space protection and conservation easements. As the community continues to grow and develop, the need for conservation and open space will continue to be an important community issue. It is highly recommended that the Town consider developing an Open Space Plan to help address this issue.

9.4.6 Agricultural Preservation

1987 Master Plan

The 1987 plan identified significant concentrations of "prime farmland" and "farmland of statewide importance" as designated by the U.S. Department of Agriculture, Soil Conservation Service. While there are lesser areas in New Boston which have been similarly designated, and other areas not so designated but devoted to agricultural and silvicultural production, the intent of the 1987 plan was to illustrate the Town's goal of advocating the protection of agricultural and agricultural-related land use activities.

Current Facts and Trends

In the 1987 plan, a total of 5,079 acres of farmland was identified in New Boston. Today, the number of acres of farmland has declined to 1,180 acres (based on 2006 New Boston tax assessor's records). This represents a decrease of 77 percent. Agricultural preservation was identified as a key planning issue in 1987.

Most New Boston residents today still do not want to see development of existing farmland. The preservation of existing fields is also important to most New Boston residents. What can the Town of New Boston do to protect the remaining farmland left within the community and to prevent further development of its prime agricultural soils? First, the remaining existing farmland and prime agricultural soils in New Boston could be shown on the Future Land Use Map. Second, the Town could encourage and help fund efforts to establish agricultural and conservation easements on threatened and valuable farmland properties. In addition, the Town could revise its existing Residential and Agricultural District to establish larger lot requirements on existing farmlands and prime agricultural soils; encourage agricultural-related tourism; and consider tax credits and incentives for farmers.

9.4.7 Important Aquifers

1987 Master Plan

The Town's 1987 plan shows the approximate boundaries of eight important aquifers that have been identified as potential sources of community water supplies by the U.S. Geological Survey and the New Hampshire Water Supply and Pollution Control Commission. To minimize the risk of contamination of these important natural resources, the Planning Board recommended that the areas in proximity to these aquifers favor low-risk, low-intensity land use activities.

Current Facts and Trends
The New Hampshire Geological Survey is currently in the process of enhancing the 1977 USGS Stratified-Drift Aquifer Maps that were prepared and used by the Town of New Boston in the development of the Town's Groundwater Conservation District Map. Numerous well logs that were not available when the Stratified Drift Aquifer Maps were first compiled will be used for subsurface geological interpretation as part of this new mapping effort. It is anticipated that the new enhanced Stratified-Drift Aquifer Maps for New Boston will be completed in 2006. It is recommended that this new information be reviewed by the Planning Board to determine appropriate future courses of action for the continued protection of the Town's aquifers. In addition, the Town's Groundwater Conservation District Map should be replaced with the new maps and the Town's Groundwater Conservation District zoning ordinance be updated accordingly.

9.4.8 Areas Not Suitable for Development

1987 Master Plan
Special flood hazard areas, wetlands, and steep slopes (25 percent and greater) were identified and shown on the Generalized Future Land Use Year 2000 map as "Areas Not Suitable For Development." Due to the relatively higher degree of risk inherent in their disturbance in comparison with other areas, and the important functions that some of these areas serve in helping to provide a balance between human activities and the natural environment, the Planning Board strongly recommended in the 1987 plan that these areas not be developed, but rather that they be incorporated within the overall Conservation and Open Space scheme of New Boston.

Current Facts and Trends
Development within special flood hazards, wetlands and steep slopes of New Boston is still a concern. These areas can be shown on the Future Land Use Map in this plan utilizing the Development Constraints Map and the Environmental Sensitive Areas Map prepared as part of the build-out analysis for this plan (see Maps 12 and 13).

9.5 Future Land Use Map

The Future Land Use Map presents a preliminary graphic and written summary of the vision statement, goals and objectives of this plan as articulated by the results of the master plan survey, and the land use recommendations contained in this plan. The purpose of this map is to provide the Planning Board with a planning tool that can be used in an advisory nature to guide the future growth and development of the Town as well as assist the Board in developing and improving the Town's land use regulations.

On April 15, 2006, the Planning Board's Master Plan Steering Committee held a successful Master Plan Public Forum. As a part of the Forum, a participatory group exercise was held to develop a Community-Based Vision Map or Future Land Use Map for New Boston. From this participatory exercise, the Master Plan Steering Committee received many public comments and suggestions regarding the growth of New Boston and where this growth should occur. A number of land use categories were developed

and dots representing these uses were placed on maps. From this input, the Master Plan Steering Committee has generated the following conceptual draft Future Land Use Map (see Map 18 on the following page). The Future Land Use Map is based upon the identification of seven land use areas. These areas are described in more detail in this chapter.

In addition, the overall concept of the draft Future Land Use Map is guided by the following themes: (1) Protecting the village center; (2) Protecting the rural character and natural environment of New Boston; and, (3) Implementing the principles of smart growth. These components are described as follows:

Protecting the Village Center

As expressed in this plan, New Boston's village center is an integral and historic part of the community. It is more than just an assemblage of buildings. The Village center is the focal point of the community's governmental, cultural and social activities. As such it must be maintained and protected as a thriving and sustainable part of the community.

It is recommended in this plan that this be accomplished by employing a variety of techniques. First, by creating a new Village District zone. Second, by protecting the historic character of the village through architectural design standards. Third, through implementing the characteristics of livable and walkable communities. These include:

- **Walkablity**. In general, a walkable village center or neighborhood is defined by the distance a person can safely walk or travel in 10 minutes or less.

- **A Civic Core and Mix of Neighborhood Uses**. This can be a simple green area or a crossroads with civic buildings. The core needs to be in a central location and proportional to the size of the village area.

- **An Interconnected Street Network.** The challenge is to avoid dead-end streets and high volumes of through traffic that can divide a neighborhood or village and diminish the livability of the area.

- **Sensitivity to Human Scale.** Neighborhoods and villages with a human scale are enjoyable places to linger, walk in, or interact with other residents. Streets tend to be narrow with sidewalks and shade trees. Buildings are generally close to the street. Parking is located in the rear.

Insert Map 18 Future Land Use here

- **Neighborhoods and Villages.** Neighborhoods and villages tend to have distinct boundaries and a good overall balance between privacy and opportunities for public interaction.

It should also attempt to:

- **Use Land Efficiently.** This can be accomplished by extending village land use patterns, encouraging multi-story/compact development as well as appropriate infill development.

- **Encourage Mixed Use.** While a majority of residents in New Boston do not support mixed-use development, this concept should not be completed disregarded. New community uses as well as residential development can successfully and attractively accommodate complementary uses.

- **Address People's Needs.** This can be accomplished by implementing the livable and walkable goals and recommendations of this plan: connecting existing public and recreational facilities through pedestrian pathways and crosswalks; providing opportunities for green space/outdoor gathering areas; also ensuring that views of the hills are protected and public facilities and services are provided.

- **Promote Good Design.** This can be accomplished by considering the historic character of existing buildings and improved aesthetics of existing commercial sites. Also by enhancing the gateways to the Town and providing opportunities for new development consistent with existing architecture.

- **Enhance Environmental Benefits.** Improved through traffic patterns and enforcement. Better drainage, storm water and sidewalk improvements. Traffic calming and improved pedestrian access. Better buffering of existing uses.

<u>Protecting the Rural Character and Natural Environment of New Boston</u>
New Boston has a long tradition of concern about protecting the natural environment and maintaining the rural character of the community as expressed in this and past master plans. Much of this work is still relevant today. This master plan confirms that these central concerns remain an important priority to the residents of the community and to the Town in the conduct of existing and future planning functions.

The following natural features have been identified as being significant and important priority areas that warrant special protection. These areas include but are not limited to:

- Farmland Soils
- Steep Slopes
- Wetlands
- Rivers, Lakes and Shorelines
- Aquifers

- Floodplains
- Forest Resources
- Open Space/Land Conservation

To protect these resources, the following land use strategies are recommended and are reflected by or included in the goals and objectives of this plan:

1. The Planning Board and Open Space Committee should schedule a joint meeting to discuss the purpose and benefits of developing an Open Space Plan for the community;

2. The Environmentally Sensitive Areas Map contained in this Plan should be used as a guide in reviewing all site plan and subdivision proposals;

3. The Open Space Committee should seek the donation/acquisition of conservation easements from willing landowners and seek to purchase priority open space areas and the development rights of valuable farmlands through current use tax penalty funds, tax liens, federal and state grants and bonds as necessary;

4. The Planning Board should evaluate the effectiveness of the Town's existing Wetlands Conservation District, Forestry Conservation District and Groundwater Resources Conservation District, Floodplain Ordinance and other local environmental regulations in protecting these resources.

5. The Town should continue to support the efforts of the Forestry Committee, the Piscataquog Watershed Association and the Local River Advisory Committee in their efforts to protect the Town's important natural resources;

6. The Conservation Commission should identify and develop protection strategies for New Boston's prime wetlands;

7. The Planning Board and Conservation Commission should consider regulations designed to protect the remaining farmland and prime agricultural soils in Town;

8. The Planning Board should consider and evaluate the feasibility of establishing density credits or a transfer of development rights program to aid in protecting the Town's most valuable natural resource priorities.

These strategies need to be pursued as part of and in combination with the Future Land Use Map.

Implementing the Principles of Smart Growth

There are two relatively new state statutes which play an important role in the development of New Boston's Future Land Use Map. RSA 9-A:1 states that local planning boards are encouraged to develop plans that are consistent with the policies and priorities established in the state comprehensive plan.

RSA 9-B, the State's Economic Growth, Resources Protection, and Planning Policy, indicates that it is the policy of the state that state agencies (and, by extension, local boards when developing plans that are consistent with state plans) act in ways that encourage smart growth.

RSA 9-B: Smart Growth is defined as "the control of haphazard and unplanned development and the use of land which results over time, in the inflation of the amount of land used per unit of human development, and of the degree of dispersal between such land areas." "Smart growth" also means the development and use of land in such a manner that its physical, visual, or audible consequences are appropriate to the traditional and historic New Hampshire landscape.

Smart growth may include denser development of existing communities, encouragement of "mixed use" in such communities, the protection of villages, and planning, so as to create ease of movement within and among communities. Smart growth preserves the integrity of open space in agricultural, forested, and undeveloped areas.

The results of smart growth may include, but shall not be limited to:

- Vibrant commercial activity within cities and towns;
- Strong sense of community identity;
- Adherence to traditional settlement patterns when siting municipal and public buildings and services;
- Ample alternate transportation modes;
- Uncongested roads;
- Decreased water and air pollution;
- Clean aquifer recharge areas;
- Viable wildlife habitat;
- Attractive views of the landscape; and
- Preservation of historic village centers.

Some of the principles of Smart Growth recommended by the New Hampshire Office of Energy and Planning for communities across the state are summarized as follows:

- Maintain traditional compact settlement patterns to efficiently use land resources, and investments in infrastructure.

- Foster the traditional character of New Hampshire downtowns, villages, and neighborhoods by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life.

- Incorporate a mix of uses to provide a variety of housing, employment, shopping, services, and social opportunities for all members of the community.

- Provide choices and safety in transportation to create livable, walkable communities that increase accessibility for people of all ages, whether on foot, bicycle, or in motor vehicles.

- Preserve New Hampshire's working landscape by sustaining farm and forestland and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts.

- Protect environmental quality by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of communities and people in New Hampshire.

- Involve the community in planning and implementation to ensure that development retains and enhances the sense of place, traditions, goals, and values of the local community.

- Manage growth locally in the New Hampshire tradition, but work with neighboring towns to achieve common goals and address common problems more effectively.

It is recommended that the above principles be incorporated into the Town's Zoning Ordinance and the Town's Non-Residential Site Plan and Subdivision Regulations, as feasible.

Future Land Use Map – Land Use Districts

As noted earlier, in developing the Future Land Use Map, the Master Plan Steering Committee identified seven new major Land Use Districts, concepts and recommendations. These districts are identified and defined as follows:

Village District

Recommendation: Establish a new Village District zone in the Town's Zoning Ordinance and Zoning Map. This recommendation is supported by the Town Center Goals and the Livable Walkable Goals contained in this plan. The intent of this new district would be to regulate development of the Village Center to maintain its rural, small town character. This character is dependent upon preserving architecture and a mix of commercial and residential uses in the district.

Zoning regulations for the Village District should allow for a mix of uses. Architectural guidelines should be established to maintain the architectural character of the district. Fire protection, lighting, open space, suitable parking and pedestrian issues should also be investigated and addressed as part of the development of the Village District. Traffic in the Village Center should be reduced by re-routing through traffic or by applying other solutions such as traffic calming techniques.

In addition to the development of the Village District, the Town of New Boston should consider participating in the New Hampshire Main Street Program. The Master Plan Steering Committee has determined that this program would be very beneficial for the Town as well as existing businesses located in the Village Center. It is recommended that the Town of New Boston investigate and participate in this program. As an aside, House Bill 657 was recently passed to encourage (tax relief) rehab and active use of under-utilized buildings in New Hampshire and town centers. Any town may adopt tax relief by majority vote at Town Meeting. House Bill 657 could be an important tool for improving under-utilized buildings located in Village Districts.

The Village District concept should also be considered in other areas in New Boston and not just be limited to the existing Village Center. One such area could be along Rt. 13 near the Goffstown town line.

The designation and boundaries of the Village District should be finalized as part of a comprehensive update of the Town's Zoning Ordinance and the establishment of this new district.

Residential, Agricultural, Open Space District

Recommendation: Replace the existing Residential and Agricultural District and Residential One District in the Town's Zoning Ordinance and Zoning Map with the establishment of a new Residential, Agricultural, Open Space District. This recommendation is supported by Land Use Goals 2, 3, 5, 6 and 7, Housing Goals 1, 3, 4, Smart Growth Goals 1, 3, 4, 5, 6, 7 and Conservation and Natural Resources Goals 1, 2, 4, 5, 8. The intent of this new district is to encourage development patterns which respect an open space plan by offering cluster development in appropriate areas as an alternative to large lot zoning.

To accomplish this, an Open Space Plan must be developed based on Natural Resources. Along with this, the Cluster Ordinance must be re-written to encourage cluster development in keeping with traditional compact development patterns of rural small towns in New Hampshire.

High density residential development should be permitted wherever it will work based on soils, slopes, wetlands, etc. as a means for providing lower development costs and preserving open space. Incentives such as transfer or purchase of development rights , density bonuses and agricultural easements should be considered to protect agricultural land. There should be an agricultural committee formed, similar to the forestry committee.

Small Scale Planned Commercial District

Recommendation: Replace the existing Commercial District in the Town's Zoning Ordinance and Zoning Map with the establishment of a new Small Scale Planned Commercial District. This recommendation is supported by all the Commercial

Development Goals and Smart Growth Goal #2. The intent is to provide for commercial growth in designated areas.

The Master Plan Steering Committee's research indicates that the townspeople would like to see limited commercial development such as small retail stores, small restaurant/food service operations, and planned medical, professional offices and services. The character of this development must be in keeping with the architectural fabric of New Boston. The majority of townspeople do not want to see "big box" stores, strip malls, or architecture not in keeping with traditional, rural small towns in New Hampshire.

To accomplish this, areas for commercial development must be identified, and architectural guidelines must be developed and incorporated into the Town's Zoning Ordinance and the Town's Non-Residential Site Plan Regulations. An Economic Development Committee should be formed and could help with this process. In addition, specific guidelines, which limit the size and square footage of commercial buildings must be developed, including aesthetic guidelines and landscaping requirements.

This new district should be applied to the existing Commercial Districts along Rt. 114 and Rt. 77, which can stand as is, with a re-emphasis on avoiding strip development patterns. The 1987 Commercial Districts should also be amended to limit development along River Road and Rt. 13. The district could also be considered along Rt. 13 south of the Village on the easterly side of the road out to the Mont Vernon Road Bridge. Also at the southern entry to the Town between the old Barss Enterprises site and the Mont Vernon line, on both sides of the road.

In addition, this new district should allow multi-family high-density residential development and mixed uses.

Scenic Corridor Overlay

Recommendation: Establish a new Scenic Corridor Overlay District in the Town's Zoning Ordinance and Zoning Map. This recommendation is supported by Land Use Goals 4, 7, 8, Livable Walkable Communities Goals 5, 6, 11, and Conservation and Natural Resource Goals 1, 3, 6, 7. The intent is to keep the beauty of the Piscataquog River intact.

To accomplish this, an ordinance must be written to maintain the scenic beauty along the river. Existing commercial and industrial uses within the river corridor should be grandfathered, but no new industrial development should be allowed to occur. Transfer of development rights could also be applied as part of this new ordinance. The designation and bounds of the scenic corridor should be determined as part of a comprehensive update of the Town's Zoning Ordinance and the establishment of the new overlay district.

As noted earlier in this plan, the majority of residents have made it clear that the scenery along Rt. 13 as it follows the Piscataquog River should be preserved in its present state. Since much of the remaining stretches of the South Branch (south of the Village) and most of the Middle Branch are largely undeveloped, it should also be a goal of the Town to preserve their shorelines for future generations to enjoy. A setback of at least 300 feet or 100 yards for new roadways or structures would be desirable, with berms, forest or other evergreen vegetation to mask such development from the shorelines. The remains of the Hogback esker along Rt. 13 south of the Mont Vernon Road Bridge should be preserved. The 1987 Commercial District zoning in that area should be amended to ensure this.

Within the Scenic Corridor Overlay District, commercial services should be limited within the Village itself, in accordance with its updated zoning and within the northeast section of the corridor along Rt. 13.

Limited Light Industrial

Recommendation: Replace the existing Industrial District in the Town's Zoning Ordinance and Zoning Map with a new Limited Light Industrial District. This recommendation is supported by Land Use Goal 8, Commercial Development Goal 4, Industrial Development Goal 1, 2, Smart Growth Goal 6, 7, and Conservation and Natural Resources Goal 1, 3, 6 and 8. The intent of this new district is to allow limited light industry which will not compromise the architectural character of New Boston, will not pollute, and will not require additional public infrastructure or utilities not currently available in New Boston.

To accomplish this, areas for Limited Light Industrial development must be identified and architectural guidelines developed. In addition, requirements for environmental impact statements should be included in this new district.

Multi-Family Residential

Recommendation: Establish a new Multi-Family Residential Overlay District in the Town's Zoning Ordinance and Zoning Map in accordance with performance standards in keeping with the architectural character of the town. This recommendation is supported by the Vision Statement of this Plan, Land Use Goal 2, 3, 5, 6, 7, Housing Goal 1a, 1b, 1c, 3, Smart Growth Goal 2, 6, and Conservation and Natural Resources Goal 2. The intent of this new district is to provide housing options so it is affordable for New Boston's teachers, policeman, children, and other median income wage earners to live here, while preserving open space, wildlife corridors, and conservation land.

To accomplish this, performance standards must be developed which will allow multi-family residential development anywhere in town based on access, soil types for septic, slopes, wetlands, and other criteria. The amount of development can be limited by the Town's Zoning Ordinance. The intent of this new overlay district is to provide housing options so it is affordable for New Boston's teachers, policeman, our children, and other

median income wage earners to live here, while preserving open space, wildlife corridors, and conservation lands.

Also the Town's Cluster Ordinance must be revised to provide incentives for developers to produce high-density single and multi-family housing.

Conservation District

Recommendation: Replace the existing Forestry and Conservation District in the Town's Zoning Ordinance and Zoning Map with the establishment of a new Conservation District. This recommendation is supported by the Vision Statement 2, Land Use Goals 3, 4, 7, Agricultural Protection Goal 3, Smart Growth Goals 4, 5, 7, and Conservation and Natural Resources Goals 1, 2, 4, 5, 6, 7, 8, 9. The intent of this new district is to protect New Boston's environmentally significant natural areas.

Some of these significant natural areas could include the Town's rivers and streams, forested steep slopes, prime wetlands and great ponds, existing conservation areas and protected lands as well as conservation areas proposed for future protection.

The Air Force Tracking Station for example has been professionally managed by the Federal Government for conservation purposes for many years, but if the land should ever leave government ownership, development could be allowed under current zoning. This zoning provides for 25 acre minimum lots, but this would not preclude a landowner from cutting all the trees on a lot and siting one house thereon.

There are other areas under conservation easement such as the DeLand Forest, Woodland Associates, the Lydia Dodge Lot, and others, which would fit into this district.

To accomplish this the Planning Board will need to identify locations of significant natural, environmental and scenic importance, and an ordinance must be written establishing a Conservation District, which protects these resources

APPENDIX A

Gravel Operations in New Boston

MAP # -LOT #	LOT LOCATION	COMPANY NAME	GPS PIT AREA (ACRES)	ACREAGE OF LOT	PR AREA*	EXC (A
001-002-008	BUNKER HILL ROAD	J F M COMPANY, LLC.	1.040	10.830	1.900	
002-062-000	TWIN BRIDGE ROAD		3.256	106.000	10.000	
003-007-001	HELENA DRIVE		1.341	5.000	4.000	
003-011-000	E. LULL ROAD		0.000	2.000	2.000	
003-026-000	RIVERDALE ROAD		0.711	4.500	4.500	
003-052-025	HEMLOCK DRIVE	HEMLOCK HILLS REALTY, LLC	6.910	16.142	5.000	
003-057-000	PARKER ROAD	AGGREGATE INDUSTRIES NORTHEAST	2.867	47.500	47.500	
003-137-000	RIVERDALE ROAD	HJG STRONG BROTHERS GRAVEL CORP.	16.544	105.000	105.000	
004-016-000	MIDDLE BRANCH ROAD	MIDDLE BRANCH ASSOCIATES, LLC.	4.207	82.000	7.330	
006-014-000	PARKER ROAD	AGGREGATE INDUSTRIES NORTHEAST	11.540	130.000	130.000	
006-016-000	RIVER ROAD	RIVERSIDE SAND & GRAVEL	0.681	16.000	2.000	
006-022-000	722 RIVER ROAD	RIVERSIDE SAND & GRAVEL	2.611	127.000	2.000	
006-045-000	306 RIVER ROAD	NEW BOSTON AGGREGATE CORP.	20.231	110.000	10.000	
008-038-000	RIVER ROAD	HILLSBORO COUNTY 4-H FOUNDATION	0.000	100.000	2.000	
008-106-000	MONT VERNON ROAD	TINGLEY FAMILY TRUST	1.283	35.000	2.000	
008-107-000	96 MONT VERNON ROAD	TINGLEY FAMILY TRUST	5.969	45.000	6.000	
010-073-000	40 SOUTH HILL ROAD	TOWNES FAMILY TRUST C/O	11.417	126.000	40.000	
010-076-000	SOUTH HILL ROAD	TOWNES FAMILY TRUST C/O				
011-001-000	42 LYNDEBOROUGH ROAD		2.733	10.730	6.000	
011-005-000	LYNDEBOROUGH ROAD		4.302	15.000	5.000	
011-006-000	MONT VERNON ROAD		7.117	18.000	18.000	
013-004-000	LYNDEBOROUGH ROAD	GRANITE STATE CONCRETE CO. INC.	0.000	35.000	35.000	
013-006-000	2ND NH TURNPIKE	TOWNES FAMILY TRUST C/O	2.243	143.000	50.000	
013-031-000	2ND NH TURNPIKE	CHARLES TOWNES C/O	1.372	98.000	6.000	
014-128-000	SUMMIT DRIVE	JOE ENGLISH STONE	68.000	38.000	68.000	
		TOTAL	176.375	1425.702	569.230	1

* INDICATES WHAT THE OWNER HAS SAID IS THEIR INTENTION TO EXCAVATE

APPENDIX B

Proposed Road Design Standards

TOWN OF NEW BOSTON
TRANSPORTATION REGULATIONS

This section is intended to provide clear definitions for the functional classifications recognized by the Town of New Boston for the current or future proposed local roadway network (non-state designated, regulated or maintained). This section will also define minimum design criteria for roadway improvements contemplated as a result of new development (new construction) or through the reconstruction/rehabilitation of existing roadways as administered through the Town's Capital Improvement Program or as required by projected growth in traffic volumes in association with proposed development. Definitions are as follows:

1. Functional Classification

The categories of roads in the functional classification system are as follows:

a. *Primary Roads (Arterials):* Roads in this category will include roads having an average daily traffic of 1,000 or more (>1000 ADT). The primary function of these roads is to carry inter-community and thru traffic, and to connect secondary roads in the system.
b. *Secondary Roads (Major Collectors):* Roads in this category will include roads having an average daily traffic (ADT) between 400 and 1,000 (400 to 1000 ADT). The primary function of these roads is to provide access to the various sections of the community from the primary roadways. These roads will collect traffic from local and subdivision roads and connect with primary roads in town.
c. *Tertiary Roads (Local/Subdivision Roads):* Roads in this category will include roads having an average daily traffic (ADT) of 400 or less. The primary function of these roads is to provide for vehicular and pedestrian movement in and around the residential and service areas of the community. These roads are to be developed to maintain the rural character of the community while functioning as safe travelways for residents.

2. Roadway Construction Requirements – Design Standards

The Town of New Boston has established the standards shown in Table 1 in relation to the construction, improvement or rehabilitation of publicly traveled roads. The basis of application of standards is to be related to the functional classifications defined above.

All new construction or improvements/rehabilitation of existing roadways will be to the satisfaction of the Board of Selectmen and under the supervision of the Road Agent or his agent(s).

TABLE 1 – DESIGN VALUES

Functional Class	Primary [5] (>1000ADT)	Secondary (400<ADT<1000)	Tertiary (<400ADT)
Min. Pavement Width (without shoulders)	24’	22’	20’
Min. desired grade	1%	1%	1%
Max. desired grade	9%	9%	10%
Max. Foreslope (non-guardrail)	3:1	3:1	3:1
Shoulder width	4’	4’	2’
Min. curve radii	500’	300’	200’ [6]
Min. tangent between curves	300’	250’	200’
Gravel base [2]	24”	18”	18”
HMA binder course [1]	2”	2”	2” [1]
HMA wearing course [1]	1”	1”	1” [1]
Cross-slope	2%	2%	2%
Desired Clear zone [4]	10’	8’	6’
Posted Speed (mph)	45	30	30
Min. SSD [3]	300	165	165

[1] *N/A for Gravel Roads (allowed for ADT <40)*
[2] *12-18” gravel (bank-run)/6” crushed gravel*
[3] *Stopping Sight Distance – measured along the center of the travel lane*
[4] *Clear Zone (obstruction free zone) is measured from the edge of travel-way*
[5] *Superelevation shall be considered as appropriate*
[6] *Minimum curve radii is not to be allowed in conjunction with profile grades in excess of 8%. In such cases a minimum radius of 300 feet will be required.*

The values included in Table 1 represent minimum desired design standards for roads considered under the defined classifications. Design exceptions will be considered by the Board of Selectmen and the Road Agent on a case-by-case basis where appropriate documentation is provided for consideration.

3. Reference Standard

All work shall conform to the State of New Hampshire, Department of Transportation “Standard Specifications for Road and Bridge Construction” and latest amendments and supplements. The Designer and/or Contractor shall be responsible for obtaining and familiarizing himself with all such NHDOT standards, amendments and supplements.

Copies of the Standard Specifications may be obtained from the NHDOT, John O. Morton Building, Hazen Drive, Concord, NH.

4. Gravel Surface

In cases of low traffic volumes (up to 50 vehicles per day) where the Board of Selectmen feel an asphalt surface is not required, the total usable roadway width shall be a minimum of 22 feet. Provision for a wider section should be considered to allow for future upgrading to an asphalt surface.

5. Bridges

Bridges, as defined by State Law (RSA 234:2), are all structures of 10 feet or greater clear span, and shall be designed to HS-20 loading (AASHTO Specifications). The minimum bridge width shall be 24 feet.

6. Utilities

Utility poles should be kept close to the right of way line, in no case closer than the ditch line and always behind curbed sections.

7. Safety

Every effort should be made to provide clear (obstacle-free) areas within the maintenance limits. The use of flatter slopes, the use of guardrail where necessary, and the use of warning signs should also be considered as appropriate.

If guardrail is to be used, it shall be installed in conjunction with appropriate breakaway end-treatments with the face of the guardrail set at 2 feet from the edge of the paved surface or a minimum of 14 feet from the centerline of the roadway, whichever is greater.

APPENDIX C

An Overview of the Common Soils in New Boston

The October 1981 "Soil Survey of Hillsborough County, New Hampshire, Eastern Part" contains some of the most recent natural resource data available for New Boston. This survey presents soils according to their parent materials, or the basic geologic or organic material in which the soil developed. Parent material is not necessarily the most critical factor in the development of a soil, but it can serve to organize the individual soils in familiar terms. The soil survey also provides sound, scientific information, that can be used to help evaluate the capability of land to support development, recreation, wildlife, forestry and open space.

Glacial Till: This is unsorted, non-stratified (or, not layered) material, such as boulders, clay, sand, and silt deposited by glacial ice. Common soil types include:

Chatfield	Paxton
Hollis	Ridgebury
Leicester	Scituate
Montauk	Woodbridge

Glacial Outwash: This is often stratified gravel, sand, and silt deposited by glacial meltwater, typically found in stream or river valleys and around lake shores. Common soil types include:

Hinckley	Pipestone
Windsor	Scarboro
Deerfield	Ninigret

Alluvial Sediments*:* This is gravel, sand, and silt deposited by streams and rivers. Common soil types include:

Pootatuck	Suncook
Rippowam	

Organic Material: This is decomposed and decomposing plant and animal residue. Common soil types include:

Borohemists	Greenwood
Chocorua	

Because of distinctive patterns of parent material, topography, and drainage situations in New Boston, the soils fall naturally into a large-scale pattern of three major soil units: Canton-Chatfield, Paxton-Woodbridge, and Hinckley-Windsor.

Canton-Chatfield soils are deep and moderately deep, well drained, and loamy and are found throughout the town. They range in slope from nearly level to moderately steep and are found at the base, side, and top of hills.

Paxton-Woodbridge soils are deep, nearly level to moderately steep, well drained to moderately well drained, and are found on smooth-sided, oval hills and uplands. Major hilltops in New Boston consist of Paxton, Chatfield, or Canton soils.

Hinckley-Windsor soils are deep, gravelly, and sandy. They range from nearly level to steep in terraces and stream valleys along the South Branch, particularly where it meets the Middle Branch. They are mostly absent from higher elevations.

Characteristics of New Boston soils and their suitability to support development are discussed below under the following soil potential ratings:

Soil Potential Ratings

In 1986, the Hillsborough County Conservation District, working with local, regional, and state officials, developed soil potential ratings to indicate the relative ranking of a given soil for development. The overall potential is based on the suitability rating for each of three uses: septic system absorption fields; dwellings with basements; and local roads and streets.

The reference soil for the septic system absorption field is on a five percent slope. The depth to high-water table and bedrock is more than 10 feet. Stones and boulders make up less than three percent of the surface. Percolation rate is 12 to 15 minutes an inch. The area is not subject to flooding.

The reference soil for a dwelling with basement is well-drained; that is, the water table is more than six feet below the surface, and is not subject to flooding. Bedrock is deeper than six feet. Stones and boulders make up less than three percent of the surface. Slopes are less than eight percent.

The reference soil for a local road or street is on a two percent slope. Depths to bedrock and the water table are greater than six feet. Rocks and stones make up less than three percent of the surface. The area does not flood.

The term reference soil refers to one with properties that are most favorable for the use assigned to it. Based on the ratings for each of the three uses, a composite rating of suitability for development was selected by a weighted average of the suitability for each of the three types of development. Potential for septic installation was considered the most important of the three ratings, so it was given a heavier weighting at 40 percent; leaving dwellings with basements, 30 percent; and roads, 30 percent.

All of the soils but farmland, floodplain, and wetland in Hillsborough County were evaluated relative to the reference soil, arrayed in descending order of relative quality and relative costs for overcoming limitations (calculated using the formula: Potential – Cost of Overcoming Limitations – Cost of Continuing Limitations). The ordered list was then divided into five soil- potential classes from very high to very low. Factors for determining soil potential ratings for development were depth to bedrock, depth to water

table, flooding potential, permeability of the septic system absorption field, slope, and stone content of the surface. Five soil-potential categories were defined.

Very-high potential means site conditions and soil properties are favorable. Installation or management costs are low, there are few or no soil limitations, soil properties are similar to those in reference soil.

High potential means site conditions and soil properties less favorable than reference soil. Costs to overcome soil limitations are slightly higher than for very-high potential.

Medium potential means site conditions and soil properties are below the reference soil, the very-high potential soil, and the high-potential soil. Costs of measures to overcome soil limitations are significant.

Low potential means site conditions and soil properties are significantly worse than those of the reference soil. Costs of measures to overcome soil limitations are very high.

Very low potential means there are severe soil limitations. The costs of measures to overcome the limitations are extremely high or prohibitive.

The "Soils Potential for Development" handbook lists detailed development potential estimates for each type of soil found in Hillsborough County.[45] The Town of New Boston Planning Department owns a copy of this handbook.

The Southern New Hampshire Planning Commission (SNHPC) has used these soil potential rating information to prepare the following General Development Capability Map (Map 20). This map specifically considers steep slopes, hydric soils, and special flood hazard areas as shown on the Flood Insurance Rate Maps (FIRM). On the basis of this map and excluding surface waters, it is estimated that some 6,560 acres are rated as having very high potential; 8,840 acres, high; 2,780 acres, medium; 1,980 acres, low; and 6,880 acres, very low potential for adequately accommodating development.

Hydric soils are rated very low potential. Both categories of farmland are included in nearly all of the rating categories, but most are included in the high potential category. The Town of New Boston requires site-specific soils mapping for all major subdivisions to ensure that more accurate information is available prior to approving subdivision plans.

Wetlands

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), has identified two classes of wetland soil: Hydric A and Hydric B. Hydric A soils are very poorly drained. Hydric B soils are those that are poorly or somewhat poorly drained (See identified Hydric A and B locations on Map 13 Environmentally Sensitive Areas).

[45] Soil Potentials for Development, Hillsborough County, New Hampshire, US Department of Agriculture, Soil Conservation Service, March, 1986.

Insert Map 19 General Development Capability here

New Boston's hydric soils are also shown collectively as wetland soils in the classification of Areas That Should Not Be Developed on the Development Constraints Map (Map 12) in this plan.

Hydric A soils are rated by the NRCS as having severe limitations for virtually all forms of development, including septic systems. The possibility of the leachate slipping down and reaching an aquifer is too threatening to public health, and there are no means of monitoring such a condition except by frequent drilling or frequent sampling of test bores drilled to suitable depths. The ability of Hydric B soils to accommodate residential development is limited.

Some Hydric B soils have seasonal high water tables, which are potentially damaging by producing wet basements or roadway frost heaves. Again, such flooding can introduce septic pollution to surface water.

Currently New Boston's Zoning Ordinance reference these soil types. However, the Hydric A and Hydric B terms are now obsolete. The Town of New Boston's Zoning Ordinance should be updated to be consistent with current State Legislation and wetland terminology. Site-Specific Soils Mapping should be used to determine the exact locations of various soil types and to ensure that proposed development, including septic systems, does not harm the wetlands or the quality of water.

APPENDIX D

1998 Local Resource Protection Priorities, New Boston

1998	Name	Type	Acres	Reason
1	Lot # 11/105	Natural & Cultural	180.0	Only remaining lot in town that has not been subdivided or developed since the town was originally divided into lots in 1751. Contains cellar hole.
2	The Depot (lot # 17/7)	Cultural	3.0	Former Railroad Station, also along Piscataquog River and a possible site for river access
3	Central & Southwestern Greenway (Lot #s 10/61; 10/63; & p/o 7/58)	Natural	15.0	Parcels required in order to complete a green way from the town center to the Lyndeborough & Mt. Vernon town line.
4	Cement Barns (p/o lot # 17/2)	Natural & Cultural	13.0	Part of Whipple Farms, important force in New Boston history; buildings remain unchanged; also adjacent to Piscataquog River.
5	Route 136 Farmland (lot #s 5/16 & 5/67)	Natural	140.0	The farmland is designated as farmland of statewide importance, one of the town's goals is to preserve farmland and rural character of town.
6	Joe English Hill (lot # 14/128)	Natural	68.0	Scenic area, possible passive recreational use, also contains some steep slopes.
7	Bog Brook/Campbell Swamp (lot # 12/89 & p/o 12/71)	Natural	156.0	Connect town owned parcels along Bog Brook with Campbell Swamp, in order to protect Brook. This area of Town has seen high development pressures.
8	Middle Branch of Piscataqoug River Corridor (lot # 3/1; 3/2; & 3/4)	Natural	41.0	These parcels would complete a protected Corridor along the Middle Branch of the Piscataqoug from the mouth to Weare line. Weare should extend this.
9	Great Meadows Corridor Extension (Lots Map 1 (38,40,23,55,15,60); 2 (121,14,24,25,112); 4 (16,64,90) & 7/10)	Natural	1254.0	Connect Great Meadows to southwestern conservation corridor and to central corridor along Piscataqoug River.

APPENDIX E

2004 Local Resource Protection Priorities Additions, New Boston

2004	Name	Type	Acres	Reason
10	Beaver Pond (Lot # 13/103, 12/104, 12/105, 15/65)	Natural	122.0	Upland, forest, field, wetlands, wildlife area and abuts tracking station. Cellar hole and well on 15/65.
11	Shaky Pond, Cambell Swamp & Environs (Lot # 12/2, 12/19, 12/88, 12/93, 12/96, 15/12 thru 18)	Natural	550.0	High development potential, need for wildlife corridors and wetlands protection, links to Beaver Pond Area
12	Wilson Hill (Lot # 6/27, 6/28, 6/33, 6/35)	Natural	230.0	High development potential. These properties would link already protected lands in New Boston to Goffstown.
13	Scofield Lot (Lot # 8/2)	Natural	36.0	Town owned, volunteer installed trails in place
14	Francestown Rd Farmland (Lot # 5/17, 5/18)	Natural	71.0	Would link RT 136 Farmland identified in 1998 with the Scofield Lot, providing a greenway and protecting habitat and wetlands
15	Parker/Riverdale (Lot # 3/57, 3/58, 3/137, 6/14)	Natural	325.0	Existing gravel pits provide wildlife corridors & open space, potential for development when excavation ends, 3/137 contains first New Boston settlement
16	South Hill Road	Natural	96.5	Easement granted to Piscataquog Watershed Association in 2002
17	South Hill Road (Lot # 13/36, 13/37, 13/38, 13/39)	Natural	310.0	Link to Frances Hildreth Townes Forest conservation land for habitat protection and wildlife corridors

APPENDIX F
Summary of New Boston's Barns, Old Mills and Stone Walls

The following key can be used in conjunction with Map 18 – Historic Resources. The number in column one of these tables corresponds with the numbers on the map.

#	Barn Name	Address	Type of barn	Approx. age
Barns in south portion of New Boston				
1		Joe English Rd.	"American"	
2		538 Mt. Vernon Rd	small - (age?)	
3	"Half & Half Farm"	480 Mt Vernon Rd	American w/ cupola	
4		135 McCollum Rd	2 small barns -- old, added garage	
5		111 South Hill Rd	historic barn, English	
6		370 South Hill Rd	American, same design as Billy Barss' and Kritzon's barns	
7	"Hillcroft Farm"	266A South Hill	barn collapsed 1980's, rebuilt	
8		30 South Hill Rd		
9		170 South Hill Rd		
10		26 Hooper Hill Rd	"English" barn	
11		"Wellswood Farm, Hooper Hill Rd	barn & sugarhouse	
12		114 Hooper Hill Rd	old barn moved here from Hopkinton fairgrounds,	19th century, wooden peg construction
13		133 Hooper Hill Rd	old barn converted to apartment house	
14		1 Bradford Lane	orig. English barn 1790's, extended as horse barn 1920's	18th century
15		9 Joe English Rd	former ice house, converted to garage. Moved from 1 Bradford Lane c.1936	
16		37 McCurdy Rd		
17	"Black Horse Farm"	63 McCurdy Rd		
18		225 McCurdy		
19		226 Joe English Rd		
20		251 Joe English	stone foundation of former barn	
21		88 South Hill Rd		
22		243 Mont Vernon Rd.	village barn	
23		64 Wilson Hill Rd	old barn	
24		15 Baker Lane	historic barn, under preservation easement	
25		?? Bedford Rd	"Old Cochran Place" barn re-built 1915	1915

#	Barn Name	Address	Type of barn	Approx. age
Barns in the village area				
26		5 Central Sq.	"The Creamery", now a residence	
27		5 Central Sq	"The Apple Barn", converted to office space	
28		6 River Rd	village barn	
29		10 River Rd	converted village barn	
30		20 River Rd		
31		22 River Rd		
32		26 River Rd	converted village barn	
33		38 River Rd		
34		48 River Rd		
35		61 River Rd	one horse in barn	
36	"Harold Todd's place"	104 River Rd	barn converted or rebuilt?	
37		14 Mill St	2 -- both sides of road	
38		22 Mill St	converted to garage	
39		25 Mill St	both sides of road	
40		30 Mill St	attached village barn	
41		36 Mill St.		
42		40 Mill St		
43		9 Meetinghouse Hill Rd		
44		16 Meetinghouse Hill Rd	converted Village barn	
45		1 Cemetery Rd	large barn from tavern era	
46		6 Bedford Rd	several farm bldgs	
47		57 Meetinghouse Hill Rd	village barn	
48		60 Meetinghouse Hill Rd	village	
49	"Betty Hooper's place"	?? Meetinghouse Hill Rd	village	
50		77 Meetinghouse Hill Rd	old barn	1826
51		9 Cemetery Rd	village barn converted, several small farm bldgs	
52		?? High St.	1 barn	
53		1 High St.	1 barn	
54		Rt. 13 south	2 village barns	
55		35 Mt. Vernon Rd	"Neville's Mill" building	
56		** Mt Vernon Rd	in former barn	
57		** Mt Vernon Rd	1 barn	
58		90 Mt Vernon Rd	barn	
59		22 Molly Stark Ln	English barn	

#	Barn Name	Address	Type of barn	Approx. age
Barns in SW area				
60		201 Old Coach Rd	historic barn, under preservation easement	
61		266 Cochran Hill Rd		
62		277 Cochran Hill Rd		
63		337 Cochran Hill Rd		
64	"Butterfield Mill Farm"	127 Butterfield Mill Rd		
65		50 Greenfield Rd		
66		72 2nd NH Turnpike		
67	"Fox Hill Farm"	178 Old Coach Rd		
68				
69		448 Clark Hill Rd		
70		185 Lyndeboro Rd.		
71		41 Misty Meadow Rd		
#	**Barn Name**	**Address**	**Type of barn**	**Approx. age**
Barns in Northeast area				
72		100 Gregg Mill Rd	2 barns	
73		66 Gregg Mill Rd	1 barn	
74		41 Davis Lane	1 barn, Davis Lane	
75		9 Davis Lane	1 barn	
76		Rt. 13	old barn	
77		52 High St.	converted "Atwood estate" barn, now clinic	
78				
79		11 Weare RD	Whipple Estate Barn, stucco carriage house, frame carriage house	
80		490 Weare Rd	"Piggery Farm" barn	
81		? Lull Rd	1950's chicken barn	
82		Parker Rd, near Howe Bridge	3 decker barn	

#	Barn Name	Address	Type of barn	Approx. age
Barns in the northwest area				
83		99 Francestown Rd	old barn, sugar house	
84		137 Francestown Rd	historic barn, endangered	
85		Tucker Mill Rd	large historic barn	
86		Shedd Rd	1 barn	
87		184 Francestown Rd	barn & sugar house	
88		Rt 136	1950's chicken barns	
89		336 Francestown Rd	historic barn	
90		Scobie Pond Rd	historic barn	
91		88 Bunker Hill Rd	historic barn	
92		?? Bunker Hill Rd	3 barns	
93		?? Bunker Hill Rd	1 barn	
94		198 Saunders Hill Rd	2 rough barns	
95		83 Saunders Hill Rd	2 barns	
96		342? Tucker Mill Rd	1 barn (home)	
97		280 Colburn Rd	"Middle Brach Farm" historic barn, (preservation easement)	
98		184 Colburn Rd	"Tucker Mill Farm" 1 barn	
99		69 Colburn Rd	1 barn	
100		32 Dodge Rd.	several barns	
101		West Lull Rd	1 barn	
102		39*? Clark hill Rd	large barn and Ell	
103		440 Clark Hill Rd	historic barn	
104		260 Clark Hill Rd	2 barns (English)	
105		*** Clark Hill Road	1 barn	
106		59 Dennison Rd	1 barn	
107		?? Thornton Rd	"English lady's" barn and riding barn	
108		41 Thornton Hill Rd	chicken house	
109		200 Clark Hill Road	historic barn	
110		52 Clark Hill Rd	historic barn	
111		13 Clark Hill Rd.	1 barn	
112		3 Valley View Ln	chicken house	

#		Address	Type of structure	Approx. age
Old Schoolhouses (in green on map)				
1		301 Joe English Rd.	well-preserved, attached to house	
2		335 Francestown Rd		
3		493? Bedford Rd.	"Schoolhouse #2"	
4		89 Lull Rd		
#		**Address**	**Type of structure**	**Approx. age**
Mills (in red on map)				
1		14 Mill St.	grist mill	1800-1810
2		35 Mt. Vernon Rd	grist mill, ax and "sharps"	c. 1850
3		24 Francestown Rd	Cider mill of the Whipple Farm	c. 1870?
4		Tucker Mill Rd		

Old Mills in New Boston

Cogswell devotes a chapter in his History of New Boston to describing the early water-power mills in the town. Saw mills and grist mills were crucial to early settlers, so these mills were the first to be set up by the original proprietors of the township. The earliest on record was the Gregg Mill, built in 1736 on the Middle Branch of the Piscataquog. Over the years, many other types of mills took advantage of New Boston's favorable conditions for water power: it has plentiful year-round streams and rivers together with hilly terrain. Cogswell lists 48 mills, mostly saw and grist, but later including mills for making wire, axes and hoes, for carding wool and making clothing, and for building mirror frames, chairs, doors and even piano frames. Unfortunately, Cogswell cites only the then-present owners' names, so pinpointing the exact locations of many of these mills is difficult today.

Of these 48, only three are now standing:

Parker's Mill (orginally White's Mill) on Mill Street in the village dates from about 1800-1810. It continued operation as a grist mill up until World War II, when it became a Merrimack Farmers Exchange. At that time, the mill machinery was removed, but the circular burr stones, imported from France, still remain. The dam gave way in 1997 and cannot now be rebuilt.

Neville's Mill, built circa 1850, is located next to the Molly Stark Tavern. This mill produced axes and "sharps." It once had a mill race running from a dam below the present-day hardware store. Remnants of the mill race can be seen behind the Post Office. The water gardens by the entrance to the restaurant are set in what remains of the sluiceway.

Hadley's Mill on Tucker Mill Road was a saw and grist mill. The dam is well-preserved. A recent owner installed a hydroelectric turbine within the mill building, which is now a residence.

Even though the actual wooden structures of other early mills have disappeared, their dams, sluiceways and foundations can still be seen.

On the Middle Branch of the Piscataquog, starting from the outlet of Scobie Pond and heading in sequence downstream:

The Morgan & Andrews Bedstead Factory - An 8 ft. deep mill race, dug long before any power equipment existed, ran for 1600 ft to this site. It is located near the road to Scobie beyond the Monastery.

Morgan's Mill - a saw mill. The beautifully-constructed stonework mill dam is still standing. It is visible from the road just before the Monastery.

Colburn's Mill - a shingle mill. It was located off Rt. 136, near the western end of Colburn Rd. It was powered from a millpond on a tributary of the Middle Branch.

Andrew's Chair & Knob Factory - off Colburn Road near Todd's Corner. A threshing mill was attached.

White's Grain Mill and Smith's Saw Mill were downstream from Colburn Rd, before Tucker Mill Rd. Only traces remain.

Hadley's Mill on Tucker Mill Rd, mentioned above, was a grain and saw mill.

Woodbury's Saw Mill, later a match factory, was located where Rt. 77 crosses the Middle Branch.

Gregg's Mill (mentioned above) located at Gregg Mill Farm was the earliest mill in town, built in 1736. The mill building had to be torn down in the 1980's, but the dam and sluiceways are still functioning. (described in Cogswell, pg. 217 ff)

On the South Branch of the Piscataquog, heading downstream from the Lyndeborough town line:

Butterfield's Mill (called Gage's Mill in Cogswell, pg. 220) Originally a box factory, later a grist and planing mill and finally a saw mill.

King's Mill -- a flouring mill, located near the bridge in Gougeville.

The Paper Mill -- Gougeville was called "Paper Mill Village" for a time. The mill's tall brick chimney stood slightly downstream from the Gougeville bridge. It was torn down in the 1950's for safety's sake. A carding and clothing mill was located in the same area.

Muzzey's Mill (called Warren's Mill in Cogswell, pg.221) A saw mill, located near the first bridge on Lyndeboro Rd, heading west. The dam site is still visible.

Marden's Mill - a shingle mill. The exact site is uncertain.

Bose's Mill - a saw mill, was located on the right side of Rt. 13 heading south from Lyndeboro Rd. The millpond was fed by a small stream, near the present log houses.

Sutherland's Mill -- located next to the bridge on Rt. 13, across the highway from the hardware store. The stonework is still evident. It was probably fed by a millrace from the Third Dam (aka Kirsch's Dam.) Mirror frames were manufactured there; later wooden pegs. It operated well into the 20th century.

Neville's Mill (as described above)

Parker's Mill (as described above)

Originally, there was a grist mill located on the site of the old blacksmith's shop which stood next to the bridge in the center of town.

The Tannery operated where the present Creamery building stands, behind The Apple Barn. The fire of 1887, which destroyed much of the village, is thought to have started there.

The Hydroelectric Plant - the Town's electricity was once supplied from a dam downstream from the Depot. Page Wilson, one of the town selectmen, ran it. When he decided to go to bed at night, he would turn off the generator and everyone's house would go dark!

The McLain Door Factory was located near the bridge leading to the Fairgrounds. A piano-frame factory was connected to this mill. Downriver from this mill, the Piscataquog became difficult to control, so there were no mills until further down the river below Howe's Bridge, where a saw mill was located.

Other mill sites -- many other mills were built on smaller streams through-out the town. Some of these sites are easily located:

Near Sunday Rock there are mill sites next to both Bedford and McCurdy Roads.

Wilson's Mill was a saw mill on Bog Brook.

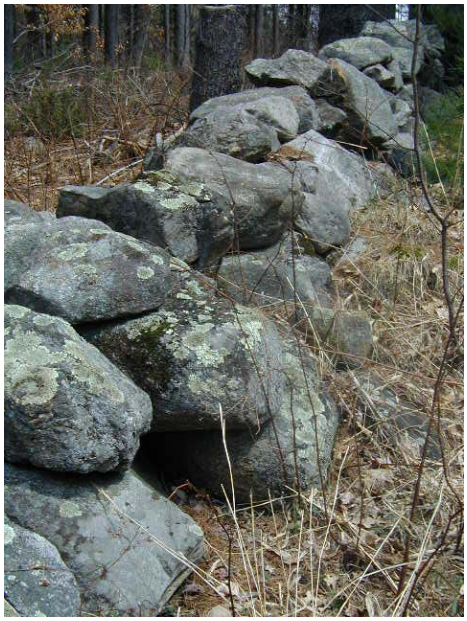
Goodwin's Mill was a saw mill at the foot of Cochran Hill, off Old Coach Rd.

There are ruins of other mills throughout the town. It is in the interest of the town to preserve all such sites whenever possible --they are important artifacts of our early history.

Stone Walls

Stone walls symbolize rural New Hampshire for both residents and visitors. They present a clear record of where early farms, pastures and roads were located. They also provide habitat and protection for wildlife, establish clear ecological boundaries, and gently remind us of New Boston's early history.

We tend to take them for granted, though, and they are more fragile than commonly supposed. Developers often regard them as obstacles, as happens when a road is proposed for widening to upgrade it from Class VI to Class V (so that the town will maintain it.) Salvage dealers buy and remove walls for fieldstone fireplaces, etc. Closer to major cities, some towns have lost most of their walls in this way. And of course, tree roots, windstorms, gravity and erosion are constantly working to bring stone walls down: "Something there is that doesn't love a wall."



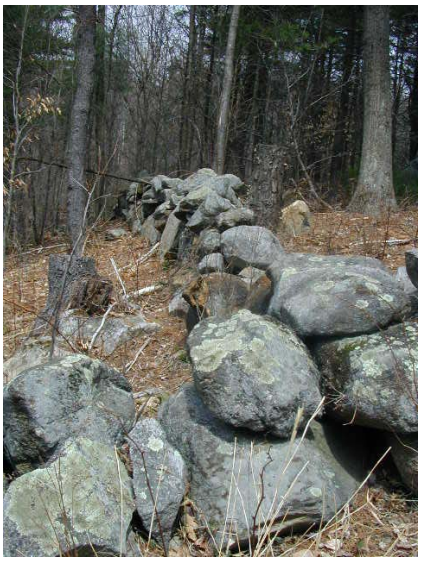
Stone walls on private land are not protected. Several state ordinances do treat specific cases: RSA 472:6 (as amended) says that if a stone wall serves as the boundary between two owners' properties, both owners must consent to its removal. Removing stone walls along designated scenic roads is discouraged. It can only be done with the consent of the planning board [RSA 231:158 (as amended)]. Scenic road designation requires a petition of 10 residents along a road.

The stones which form the estimated 429 miles of walls in New Boston were brought here by the last glacier, the Laurentide Ice Sheet, which at its peak 20,000 years ago was more than 2 miles thick in this area. As it receded, it deposited sand, gravel, stones and boulders as described in the Natural Resources chapter. The early settlers found that the glacial till hilltops (drumlins) were the best for farming. When first cleared, such fields had as much as two feet of well-drained, rock-free topsoil, deposited by thousands of years of forestation.

But the act of clearing the land exposed the soil to erosion and frost action: within a few decades, each winter's freezing and thawing brought a crop of stones up from the glacial till beneath the topsoil, which had to be cleared each spring. The early wooden fences began to be replaced by stone walls. These were mostly built over several generations, from the time of the Revolution up to about 1830. Farms which survived after the Civil War had much less of a problem with rocks: the underlying till had only a finite number of stones to heave up to the surface.

The standard "Three Rod Roads" of the early days also tended to produce their own stone walls. Erosion and wagon wheel ruts uncovered stones which had to be hauled to the roadside. These gave rise to the familiar parallel walls which skirt the old roadways.

Most stone walls were built to show property lines, and to get stones out of fields and pastures. By themselves, stone walls were not intended to fence in livestock: they were not high enough to keep any self-respecting cow or sheep confined. As a result, wooden fence rails were added on top. There is no evidence of these fences today, since as fields were abandoned the wood quickly rotted away. Only the stone walls that had supported them remain. After 1874, barbed wire was often strung above existing stone walls where livestock was kept.



There were several kinds of walls. Most common were the "tossed" walls, which were simply rocks piled at random along the edge of a field or pasture. More elaborate were the "laid" walls, which involved a good bit of skill in placing rocks so they would bear several layers and remain standing for years. These could be either single laid walls, which mostly surrounded hayfields or pastures, or double walls with smaller stones filled in between them, which usually surrounded cultivated land.

Over time, well-maintained stone walls became a point of pride among farmers and often show a great sense of design. New Boston has examples of many types of walls. Since the oldest farms tended to be on the hilltops, some fine walls are to be found on Cochran, Clark, Bunker, South, Meetinghouse and Hooper hills. The same skilled stone masonry produced the dams at Tucker Mill and near the Monastery. The wild stone walls found in the middle of almost any forest here show how much of New Boston's land was cleared at one time. All of these walls are historical artifacts which need to be preserved whenever possible. Stone walls bind us to our past.

Stone walls run through these forests
Like the lines in a face;
Each rock means a back was bent
To fit it into place.
And a man stood here
With fields to clear;
A team of oxen
And an axe was all he owned.
Now his fields are overgrown.

APPENDIX G

NH Scenic and Cultural Byway Assessment and Application Form

Byway Assessment

Name of Byway: _____Road Segment:_____Date: _____

Positive Qualities			1	2	3	4	5	Comments
A	Water and Land Form Features							
	1	Lake, pond, marsh, wetland						
	2	River, brook						
	3	Waterfall, beach, coast						
	4	Cliff, boulders, rock outcrop						
	5	Hill, mountain						
	6	Regional feature						
	7	Other						
B	Landscape Composition & Effects							
	1	Unframed, enclosed valley or view						
	2	Panoramic or distant view						
	3	Ephemeral effect (sunset, etc.)						
	4	Seasonal effect (ice formation, etc.)						
	5	Other						
C	Vegetation							
	1	City or town park						
	2	Agricultural pattern (contour plowing, etc.)						
	3	Field & forest edge						
	4	Woodland or orchard						
	5	Wildflowers, meadows, pasture						
	6	Other						
D	Structures							
	1	Farmstead or unusual buildings						
	2	Historical structures						
	3	Archeological site						
	4	Covered or other bridge						
	5	Stonewall or wooden fence						
	6	Cemetery						
	7	Distant village or village edge						
	8	Other						
E	Road Characteristics							
	1	Conforms to landscape						
	2	Road pattern (cobblestone, etc.)						
	3	Rustic drainage mechanism						
	4	Other						

New Hampshire Scenic and Cultural Byways

Byway Assessment

Name of Byway: _____ Road Segment: _____ Date: _____

Negative Qualities			1	2	3	4	5	Comments
A	Landscape scars							
	1	Obtrusive lumbering scars or slash						
	2	Erosion						
	3	Gravel or sand mining operations						
	4	Utility line, corridor or substation						
	5	Angular road cut or fill						
	6	Other						
B	Structures							
	1	Strip development						
	2	Incompatible building in town						
	3	Incompatible building in rural area						
	4	Incompatible fence or wall						
	5	Dilapidated building						
	6	Dilapidated fence or wall						
	7	Gas station or repair shop						
	8	Auto sales or large parking area						
	9	Junkyard or landfill						
	10	Storage tanks						
	11	Obtrusive signage (size, too many, etc.)						
	12	Stark drainage system						
	13	Other						
D	Other							
	1	Litter						
	2	Heavy traffic						
	3	Polluted water						
	4	Structures blocking view						
	5							
	6							
	7							
	8							

NH Scenic and Cultural Byways Application

New Hampshire's Scenic and Cultural Byways Program, established in 1992 by the legislature, identifies roadways throughout the state that are deemed worthy of visitation by the traveling public.

The purpose of the New Hampshire Scenic and Cultural Byways program is twofold: 1) to support economy of the area by fostering visits by the traveling public and 2) to encourage the preservation of our resources by encouraging public pride in our communities.

Application Process:

1. Submit a completed inventory that identifies aspects of your byway as traveled from both directions. Please augment your application with:
   - photos or slides
   - a map indicating the byway and any connection to other state byways
   - a narrative identifying conditions along the byway as appropriate, considering
     - ✓ highlights
     - ✓ intrinsic qualities
     - ✓ physical conditions along the road and safety
     - ✓ promotional material and
     - ✓ protection or conservation measures
   - indication of community support (letter form Board of Selectmen)

2. Your application package will be reviewed by the NH Scenic and Cultural Byway Council to determine eligibility for inclusion into the NH Byway network.

3. A subcommittee of the Byway Council will visit the byway to review the byway and assess its qualities.

4. A public meeting will be held in the town to determine community support. This can be concurrent with a Board of Selectmen's meeting, following the regular posting of agenda items for the meeting.

5. The Council will then use the information you provide and the recommendation of the subcommittee to make the designation decision.

6. You will be notified of their determination within two weeks of the meeting at which they vote on your byway's designation.

Note:

It is anticipated that there will be a variety of visitor facilities and amenities located along the byway.

Send material to: Carol Barleon
NH Scenic and Cultural Byways Program
57 Regional Drive
Concord, NH 03301
carol.barleon@nh.gov

APPENDIX H

New Boston Build Out Analysis

A Build-Out Analysis is a useful tool to reveal potential development possibilities. It is performed to identify the "buildable" lands within a community, thereby providing a good idea of the potential for future growth. The calculations are driven by the community's existing land development regulations and the supply of "buildable" land.

This analysis was performed with the use of GIS and it involved multiple steps using available data from the GRANIT database at the Complex Systems Research Center, University of New Hampshire. A total of six maps were created to illustrate the analysis in a graphic format. Calculations were performed to determine the total number of acres, lots, dwellings and population that could be expected if all the identified "buildable" lands in the community were developed as set forth by the Town's existing zoning regulations. The methodology as well as the assumptions of the analysis is discussed in the following section.

One of the primary benefits of a Build-Out Analysis is that it can show how much land area could be developed under existing land use regulations and where this development could occur within a community. It can also show how many residential lots or dwelling units could be developed and how much the population of the community could increase at full build-out.

The results of a Build-Out Analysis are intended to raise awareness of a community's future growth and development possibilities. The results can also generate numerous questions such as:

- Is this the way we want our community to grow and develop?
- Are our land development regulations working the way we want them to?
- Are there areas within the community, which should not be developed or be developed at lower densities?
- Are there areas, which should be developed at higher densities?
- What steps should the community be taking now to address future growth?

Most importantly, the results of a Build-Out Analysis can help a community change if it wishes to achieve a different result.

<u>Methodology & Assumptions</u>

This Build-Out Analysis specifically looks at the potential development of New Boston under the Town's existing zoning regulations. It is a conservative estimate of the Town's future growth of it's unconstrained "Buildable Lands" as well as its constrained "Marginal Lands".

It begins by identifying all the existing developed lands as well as all the potential "buildable" and "marginal" lands within the community. A clear distinction is made in the analysis between "buildable" lands and "marginal" lands. Both are open undeveloped lands that could be developed at some point in time under the Town's existing land use regulations. The main difference is that "Buildable" lands are suitable for development, because they are generally free of many development constraints, such as wetlands, steep slopes (>25%) and flooding. "Marginal Lands" on the other hand are less suitable for development due to the existence of a variety of development constraints.

The first step in the analysis was to create the ***Existing Land Use Map*** (see Map 1). Much of this work had been previously done by the SNHPC. The Town's 2002 composite tax maps were merged with the Town of Weare's 2003 tax assessor database using GIS. A first cut existing land use map was generated based upon the assessor's land use codes in the database. Lots shown with building values were assumed to be developed and lots with no building values were assumed vacant.

To accurately represent all the vacant undeveloped land in New Boston, it was determined that instead of showing all existing residential lots greater than 5 acres in size as developed that the undeveloped portions of these lots could be shown as open and vacant land. This was accomplished by dividing the lots into two parts – the developed portion of the lot containing the primary dwelling, which was shown as three acres in size and the undeveloped portion representing the balance of the lot, which was shown as vacant. To assist in this process, 1998 USGS Orthophoto Quads were used to verify the existing residential use of each parcel.

When completed the final Existing Land Use Map was divided into the following ten land use categories: Commercial, Industrial, Public/Semi-Public, Single-Family, Two-Family, Manufactured Housing, Town Forest, Vacant, Water and Roads.

Once the Existing Land Use Map was prepared, GIS was then used to generate a "Developed Lands" data layer by tax map lot and parcel. This layer consists of all the existing developed commercial, industrial, single-family, two-family, multi-family, manufactured homes within the community.

The second step in the analysis was to create a ***Conservation & Public Lands Map*** showing all public lands and all the conservation lands and easements publicly and privately-owned within New Boston. From this map, a "Protected Lands" data layer was generated by tax map lot and parcel.

The third step in the analysis was to create a ***Natural and Man-Made Hazards Map*** showing areas of both man-made hazards and natural hazards. The man-made hazards include sand and gravel mining; underground storage tanks facilities; power transmission lines; potential contamination sites; junkyards; and roads and ground water hazards. The natural hazard areas include flood hazards, hydric soils, steep slopes (greater than 25%), streams and water bodies. From this map, a "Man-Made Hazards" data layer and a "Natural Hazards" data layer was generated by tax map lot and parcel. In addition, an

Environmental Sensitive Areas Map (see Map 13) was produced showing such sensitive environmental lands as stratified drift aquifers, wetlands, prime farmlands and farmlands of statewide importance, conservation and public lands and streams and watershed boundaries.

The fourth step in the analysis was to create a ***Development Constraints Map***. This was accomplished by using GIS to merge all four data layers generated from Maps 1, 2 and 3 into one map. The total acreage of each constraint category was also calculated and then shown on the map. Using this map and GIS, a new "Buildable Lands" data layer was created by identifying all the undeveloped lots and parcels that were not included in the constraint categories making up the map. In addition, an Excel spreadsheet was created containing all the newly identified "Building Lands" data.

In the creation of this spreadsheet, two categories were shown: "Buildable Lands" where the development constraints were shown on the *Development Constraints Map* to occupy less than 25% of the lot area and "Marginal Lands" were development constraints were shown to occupy more than 25% of the area of the lot. This distinction was made because of the difficulties and the additional costs associated with the development of marginal lands. All of the active sand and gravel excavations located in New Boston were considered to be man-made hazards and thus excluded from the analysis. At some future date when these properties are reclaimed some of this land may be considered buildable. In addition, a *Zoning Map* of the Town was produced.

The next step of the analysis required an evaluation of all the identified "Building Lands" and "Marginal Lands" based upon the Town's current zoning and subdivision regulations. To accomplish this, work on creating the ***Build-Out Map*** (see following Map 20) began and the Town was divided into six geographical sections. With the use of GIS, zoning information was added to the map and all the "Buildable Lands" and "Marginal Lands" were then categorized by zone, acreage and geographic section.

Within the Town's R-A Residential District, any front lot or parcel (with frontage on a public road) less than two acres in size and any back lot or parcel (a lot using backland, thereby, being behind a road frontage lot) less than 5 acres in size was excluded from the database and map. All the front and back lots within this district were determined by first determining if they meet the minimum public road frontage requirement of 50 feet for back lots and the minimum requirement of 200 feet at the front 50 foot setback line for front lots.

Within the R-1 Residential District, any lot or parcel less than 1.5 acres in size with less than 150 feet of public road frontage and any lot or parcel less than 2.0 acres in size with less than 200 feet of public road frontage was excluded from the database and map. The Town's Cluster Residential Development Standards were not included in this analysis as it was assumed that any tract of land greater than 15 acres in size within the R-A District would essentially contain the same density as if it were being developed under traditional subdivision practices. Similarly two-family and multi-family development options under the R-A District were not included in this analysis.

Insert Map 20 Build Out Here

Once these land screening steps were accomplished, the parcel database was finalized and ***Build-Out Maps*** were created one map showing "Buildable Lands" the other map showing "Marginal Lands". Separate tables summarizing the acreage of both the "Buildable Lands" and the "Marginal Lands" were then added to the maps.

After the identifying all the "Buildable Lands" and "Marginal Lands", the next step in the analysis was to calculate the total number of dwelling units as well as the increased population that could be anticipated at some point in time when all the identified "Buildable Lands" and "Marginal Lands" are developed. The Build-Out Analysis makes no assumptions as to when these lands may be developed in the future. This is driven by market conditions and other variables, which are not relevant to the analysis. The Build-Out Analysis only provides an estimate of the overall growth potential of the Town.

Several assumptions were made to complete these calculations. Because the minimum lot size in a particular zoning district determines the number of potential residential lots that can be developed, several simple calculations were performed.

First, in the R-1 and R-A districts, all the "buildable" and "marginal" lots containing 10 acres or more (the typical size of a major subdivision) were first multiplied by a percentage of 0.4 assuming the installation of street(s) would be needed in order to subdivide the property. The resulting net buildable area was then divided by the minimum lot sizes of 1.5 acres in the R-1 District and 2 and 5 acres in the R-A District to estimate the potential number of residential lots. The factor 0.4 represents the overall average percent of the acreage of streets to the total property acreage within the last eleven subdivisions approved by the Planning Board.

A 10 acre cut-off was used based upon the assumption that there are fewer design issues and the need for right of way does not generally exist for properties less than 10 acres in size. A 1.5 acre minimum lot size was used to estimate the number of lots which could be developed from all the "Buildable Lands" and the "Marginal Lands" within the R-1 District. In the R-A District, a minimum lot size of 2 acres was used to estimate the lots that could be developed from all the "Buildable Lands" and a minimum lot size of 5 acres was used to calculate the number of lots that could be developed from all the "Marginal Lands." This distinction was made as most of the back lots within the R-A District are "Marginal Lands" because they are difficult to develop due to a variety of constraints. Thus, a larger lot size would typically result.

A minimum manufactured housing space requirement of 15,000 square feet was utilized to estimate the number of new manufactured housing spaces within the "MHP" Manufactured Housing Park District. These minimum lot and space sizes reflect the Town's zoning requirements and the experiences that the Planning Board has had with development within these areas of Town. Therefore, the results are reasonable and conservative.

The last calculation performed was to determine the population resulting from the estimated number of dwelling units. This was a straightforward calculation as it was

assumed that there would be an average of 2.90 persons per household (based on the 2000 US Census) for New Boston.

Findings

A total of **9,150** acres of land consisting of a total of **357** lots were identified as suitable for future development. This represents a total of 14.30 square miles or roughly 33% of the Town of New Boston (there are a total of 43.2 square miles in the Town). Currently 16.07 square miles of land or roughly 37% of New Boston is developed or protected (source: SNHPC, Build Out Analysis).

Of the total acreage, **6,288** acres consisting of **262** lots were identified as "Buildable Lands" (see table shown below). The greatest concentration of "Buildable Lands" (91%) was found to exist within the Residential and Agricultural District, followed by 5.6% in the Commercial District, 2.71% in Manufactured Housing Park and 0.66% in the Residential One District. Sections 2, 4 and 6 had the most acreage of available "Buildable Lands"

Buildable Lands (in Acres)				
Sections	**Commercial**	**Residential and Agricultural**	**Residential One**	**Manufactured Housing Park**
Section 1	52.97	630.32		96.08
Section 2		1,033.05	25.17	
Section 3		719.99	16.33	
Section 4	65.85	1,283.82		
Section 5	111.62	821.10		74.53
Section 6	124.30	1,232.71		
Total	354.74	5,721.00	41.50	170.61
Percent	5.64%	90.98%	0.66%	2.71%

Total Lots	262.00
Total Acres	6,287.85

Of the total acreage, **2,862** acres consisting of **95** lots were identified as "Marginal Lands" (see following table). The greatest concentration of "Marginal Lands" (97%) was found to exist within the Residential and Agriculture District, followed by 1.9% in the Commercial District and 0.93% in the Residential One District. No "Marginal Lands" were found in Manufactured Housing Park. Sections 2, 3 and 5 had the most amount of available acreage of "Marginal Lands."

Marginal Lands (in Acres)				
Sections	**Commercial**	**Residential and Agricultural**	**Residential One**	**Manufactured Housing Park**
Section 1	54.65	420.43		
Section 2		680.12		
Section 3		103.14		
Section 4		735.26		
Section 5		553.72	26.49	
Section 6		288.29		
Total	54.65	2,780.97	26.49	0.00
Percent	1.91%	97.16%	0.93%	0.00%

Total Lots	95.00
Total Acres	2,862.12

Based upon the calculations made in this analysis, it is estimated that a total of **3,447** dwelling units could be built at some time in the future on the identified "Buildable Lands" in New Boston (see table below). Assuming 2.90 persons per household (2000 US Census) and the estimated 3,447 dwelling units, it is possible an additional **9,996** people could be added to the Town in the future.

Number of Dwelling Units "Buildable Lands" Totals By Zone and Section

Sections	Commercial	Residential and Agricultural	Residential One	Manufactured Housing Park	Total Number of Units	Estimated Population*
Section 1		292		442	734	2,129
Section 2		478	15		493	1,429
Section 3		330	10		340	986
Section 4		589			589	1,708
Section 5		375		343	718	2,082
Section 6		573			573	1,662
Total Units		2,637	25	785	3,447	
Percent		77%	1%	22%	100%	

Total Units	3,447	*Estimated Population = Total N# Units x Persons Per Household 2.90
Total Population*	9,996	

It is estimated that a total of **505** dwelling units could be built at some time in the future on the identified "Marginal Lands" in New Boston (see following table). Assuming 2.90 persons per household (2000 US Census) and the estimated 505 dwelling units, it is possible an additional **1,464** people could be added to the Town in the future.

Number of Dwelling Units "Marginal Lands" Totals By Zone and Section

Sections	Commercial	Residential and Agricultural	Residential One	Manufactured Housing Park	Total Number of Units	Estimated Population*
Section 1		72			72	209
Section 2		123			123	357
Section 3		14			14	41
Section 4		132			132	383
Section 5		96	16		112	325
Section 6		52			52	151
Total Units		489	16		505	
Percent		97%	3%		100%	

Total Units	505	*Estimated Population = Total N# Units x Persons Per Household 2.90
Total Population*	1,464	

When combining the results of both the "Buildable Lands" and the "Marginal Lands" analysis, it can be anticipated that a total of **3,952** dwelling units could be built and a total of **11,460** people could be added to the Town at some point in time.

These numbers would be in addition to the Town's current **1,462** households and existing population of **4,138** people (2000 US Census), thereby resulting in the following potential build-out (existing and projected):

Future Number of Dwellings:
5,414
Future Population:
15,598

Build Out Parcel Data By Zone, Map Lot#, Section, Acres and Estimated Dwelling Units

Commercial						
	Buildable Lots	Buildable Acres	Marginal Lots	Marginal Acres	Both Lots	Both Acres
Section 1	5	52.97	2	54.65	7	107.62
Section 2					0	0.00
Section 3					0	0.00
Section 4	1	65.85			1	65.85
Section 5	2	111.63			2	111.63
Section 6	1	124.30			1	124.30
Totals	9	354.75	2	54.65	11	409.40

Buildable Commercial			
Count	PID	SECTIONS	ACRES
1	000200280001	SECTION 1	8.09281
2	000300630013	SECTION 1	5.90870
3	000500210001	SECTION 1	4.64741
4	000500300000	SECTION 1	4.42369
5	000500550000	SECTION 1	29.90172
		Total Section 1	**52.97433**
1	001401160000	SECTION 4	65.85064
		Total Section 4	**65.85064**
1	001500320004	SECTION 5	5.29271
2	001500390000	SECTION 5	106.33396
		Total Section 5	**111.62667**
1	000600220000	SECTION 6	124.30087
		Total Section 6	**124.30087**

Marginal Commercial			
Count	PID	SECTIONS	ACRES
1	000300520025	SECTION 1	8.33918
2	000500210000	SECTION 1	46.31110
		Total Section 1	**54.65028**

Residential & Agricultural						
	Buildable Lots	Buildable Acres	Marginal Lots	Marginal Acres	Both Lots	B
Section 1	31	630.32	16	420.43	47	
Section 2	43	1,033.05	14	680.12	57	
Section 3	38	719.99	10	103.14	48	
Section 4	48	1,283.82	21	735.26	69	
Section 5	49	821.10	24	553.72	73	
Section 6	39	1,232.71	7	288.29	46	
Totals	248	5,721.00	92	2,780.97	340	

Buildable Residential and Agricultural				
COUNT	PID	SECTIONS	ACRES	ESTIMATED DU
1	000200310000	SECTION 1	23.00902	8.00
2	000200310006	SECTION 1	2.13222	2.00
3	000200630000	SECTION 1	10.29668	5.00
4	000200690000	SECTION 1	7.02743	3.00
5	000200770000	SECTION 1	8.29100	4.00
6	000200840000	SECTION 1	2.53423	1.00
7	000200870000	SECTION 1	14.29799	7.00
8	000200960000	SECTION 1	25.34335	9.00
9	000201230000	SECTION 1	82.87258	30.00
10	000201510000	SECTION 1	21.97853	8.00
11	000300090000	SECTION 1	12.12561	6.00
12	000300380000	SECTION 1	5.02245	2.00
13	000300520000	SECTION 1	25.56855	9.00
14	000300630024	SECTION 1	2.18822	1.00
15	000301210000	SECTION 1	14.18590	7.00
16	000301210001	SECTION 1	2.54641	1.00
17	000301210002	SECTION 1	2.07378	1.00
18	000301400000	SECTION 1	5.83602	2.00
19	000301430000	SECTION 1	2.02052	1.00
20	000500190000	SECTION 1	38.39495	14.00
21	000500200000	SECTION 1	135.08722	50.00
22	000500250000	SECTION 1	29.28530	10.00
23	000500320000	SECTION 1	19.00654	9.00
24	000500330000	SECTION 1	30.24677	11.00
25	000500410000	SECTION 1	13.52774	6.00
26	000500510000	SECTION 1	38.10433	14.00
27	000600030000	SECTION 1	5.79145	2.00
28	000600120000	SECTION 1	32.68219	12.00
29	000800120000	SECTION 1	9.73343	4.00
30	000800250000	SECTION 1	5.58173	2.00
31	30	SECTION 1	3.53215	1.00
		Total Section 1	**630.32429**	**242.00**
1	000100020004	SECTION 2	19.96934	9.00
2	000100120000	SECTION 2	9.44651	4.00
3	000100120001	SECTION 2	33.31721	12.00
4	000100130000	SECTION 2	10.66356	5.00
5	000100180000	SECTION 2	5.76862	2.00
6	000100470000	SECTION 2	49.89178	18.00
7	000100580000	SECTION 2	12.85525	6.00
8	000201300000	SECTION 2	12.69883	6.00
9	000201380000	SECTION 2	5.16610	2.00
10	000201410000	SECTION 2	15.32072	7.00
11	000201430000	SECTION 2	5.90762	2.00

12	000400010000	SECTION 2	5.64811	2.00
13	000400020002	SECTION 2	2.13728	1.00
14	000400120000	SECTION 2	30.87825	11.00
15	000400140000	SECTION 2	23.03355	8.00
16	000400160000	SECTION 2	61.04490	22.00
17	000400210000	SECTION 2	7.51853	3.00
18	000400230000	SECTION 2	16.70688	8.00
19	000400250000	SECTION 2	16.44675	8.00
20	000400260000	SECTION 2	5.10572	2.00
21	000400320001	SECTION 2	2.63076	1.00
22	000400360000	SECTION 2	14.43844	7.00
23	000400370000	SECTION 2	113.50192	42.00
24	000400440000	SECTION 2	15.37199	7.00
25	000400530000	SECTION 2	18.76661	9.00
26	000400540000	SECTION 2	46.50717	17.00
27	000400620000	SECTION 2	44.87593	16.00
28	000400640000	SECTION 2	108.08430	39.00
29	000400740000	SECTION 2	4.68002	2.00
30	000400760001	SECTION 2	8.16555	4.00
31	000400900000	SECTION 2	56.42219	20.00
32	000400960001	SECTION 2	5.09245	2.00
33	000400960002	SECTION 2	5.80275	2.00
34	000400970000	SECTION 2	36.04742	13.00
35	000400990000	SECTION 2	14.15383	7.00
36	000500030000	SECTION 2	4.40276	2.00
37	000500060000	SECTION 2	12.93873	6.00
38	000500150000	SECTION 2	2.20021	1.00
39	000500160000	SECTION 2	87.36427	32.00
40	000800010000	SECTION 2	27.53499	20.00
41	000800090000	SECTION 2	2.53102	1.00
42	3	SECTION 2	2.12441	1.00
43	5	SECTION 2	49.88870	18.00
		Total Section 2	**1033.05193**	**407.00**
1	000700010000	SECTION 3	40.60665	15.00
2	000700070000	SECTION 3	23.01780	8.52
3	000700080000	SECTION 3	5.18480	2.00
4	000700100000	SECTION 3	43.75946	16.00
5	000700100001	SECTION 3	7.34817	3.00
6	000700120000	SECTION 3	5.48275	2.00
7	000700540000	SECTION 3	24.17601	9.00
8	000700560000	SECTION 3	34.93076	12.00
9	000700560001	SECTION 3	13.02584	6.00
10	000700570000	SECTION 3	10.98190	5.00
11	000700580000	SECTION 3	28.26119	10.00
12	000700580000	SECTION 3	75.61818	27.00
13	000700640001	SECTION 3	4.42790	2.00
14	000700670003	SECTION 3	6.64139	3.00

15	000700730000	SECTION 3	7.43049	3.00
16	000700740000	SECTION 3	28.15658	10.00
17	000801180000	SECTION 3	6.27419	3.00
18	001000030000	SECTION 3	41.45514	15.00
19	001000070000	SECTION 3	13.06794	6.00
20	001000100000	SECTION 3	12.69009	6.00
21	001000150000	SECTION 3	20.17855	10.00
22	001000180000	SECTION 3	7.32556	3.00
23	001000200000	SECTION 3	8.97492	4.00
24	001000220000	SECTION 3	37.09999	13.00
25	001000230000	SECTION 3	5.21702	2.00
26	001000320000	SECTION 3	6.14745	3.00
27	001000610000	SECTION 3	75.77284	28.00
28	001000620000	SECTION 3	16.54272	8.00
29	001000630000	SECTION 3	48.78212	36.00
30	001000650000	SECTION 3	3.29911	1.00
31	001000660000	SECTION 3	7.26647	3.00
32	001100040000	SECTION 3	2.84515	1.00
33	001100080000	SECTION 3	4.11927	2.00
34	001100120000	SECTION 3	14.09014	7.00
35	001100130000	SECTION 3	15.56130	7.00
36	001300010001	SECTION 3	5.49520	2.00
37	001300010002	SECTION 3	5.95495	2.00
38	13	SECTION 3	2.78267	1.00
		Total Section 3	**719.99266**	**296.52**
1	000800960000	SECTION 4	14.09326	7.00
2	001000740000	SECTION 4	4.81159	2.00
3	001000800000	SECTION 4	6.93614	3.00
4	001100100000	SECTION 4	9.56634	4.00
5	001100150000	SECTION 4	5.58875	2.00
6	001100150001	SECTION 4	8.87734	4.00
7	001100170000	SECTION 4	18.18680	9.00
8	001100170000	SECTION 4	18.18680	9.00
9	001100230000	SECTION 4	15.22990	7.00
10	001100250000	SECTION 4	99.79539	36.00
11	001100300002	SECTION 4	5.33523	2.00
12	001100350000	SECTION 4	4.03457	2.00
13	001100380000	SECTION 4	2.56156	1.00
14	001100430000	SECTION 4	124.97106	46.00
15	001100500000	SECTION 4	4.07450	2.00
16	001100540018	SECTION 4	3.29813	1.00
17	001100540030	SECTION 4	2.84676	1.00
18	001300040000	SECTION 4	27.88230	10.00
19	001300050000	SECTION 4	29.14357	10.00
20	001300110000	SECTION 4	31.31322	11.00
21	001300150000	SECTION 4	26.63810	9.00
22	001300160000	SECTION 4	21.23773	8.00

23	001300310000	SECTION 4	43.27005	16.00
24	001300350000	SECTION 4	47.82336	17.00
25	001300370000	SECTION 4	82.61613	30.00
26	001300380000	SECTION 4	19.86394	9.00
27	001300390000	SECTION 4	85.25649	31.00
28	001300540000	SECTION 4	87.76167	32.00
29	001300540002	SECTION 4	9.23524	4.00
30	001300550000	SECTION 4	72.11852	26.00
31	001400160000	SECTION 4	6.03383	3.00
32	001400180000	SECTION 4	56.20379	20.00
33	001400270000	SECTION 4	36.33309	13.00
34	001400310000	SECTION 4	6.31456	3.00
35	001400360001	SECTION 4	3.07910	1.00
36	001400640000	SECTION 4	21.36343	7.00
37	001400660000	SECTION 4	20.27292	7.00
38	001400690000	SECTION 4	43.95133	16.00
39	001400720002	SECTION 4	4.06400	2.00
40	001400840000	SECTION 4	97.60332	36.00
41	001400900000	SECTION 4	2.67241	1.00
42	001401170001	SECTION 4	12.22945	6.00
43	001401200000	SECTION 4	23.49268	8.00
44	001401260000	SECTION 4	5.42908	2.00
45	14	SECTION 4	3.46489	1.00
46	16	SECTION 4	3.38421	1.00
47	20	SECTION 4	2.08005	1.00
48	36	SECTION 4	3.28932	1.00
		Total Section 4	**1283.81590**	**480.00**
1	000600290000	SECTION 5	161.97596	59.00
2	000800780000	SECTION 5	70.57097	52.00
3	000800820000	SECTION 5	2.08785	1.00
4	000800840015	SECTION 5	3.49033	1.00
5	000800840020	SECTION 5	2.33950	1.00
6	000800840024	SECTION 5	2.95059	1.00
7	000800840026	SECTION 5	5.44862	2.00
8	000800880000	SECTION 5	2.81705	1.00
9	000800890000	SECTION 5	4.93542	2.00
10	000900290000	SECTION 5	23.12549	8.00
11	000900320000	SECTION 5	23.04390	8.00
12	000900320000	SECTION 5	23.04390	8.00
13	000900540002	SECTION 5	5.79490	2.00
14	000900540007	SECTION 5	2.55337	1.00
15	000900540008	SECTION 5	3.34863	1.00
16	000900560000	SECTION 5	18.68537	9.00
17	001100170000	SECTION 5	18.18680	9.00
18	001100770000	SECTION 5	3.97010	1.00
19	001101050000	SECTION 5	21.26021	15.00
20	001101080000	SECTION 5	7.12815	2.00

21	001101110000	SECTION 5	21.85841	8.00
22	001101170000	SECTION 5	2.83771	1.00
23	001101180000	SECTION 5	2.12854	1.00
24	001101250000	SECTION 5	22.31463	8.00
25	001200100000	SECTION 5	3.09140	1.00
26	001200190000	SECTION 5	46.16596	17.00
27	001200190000	SECTION 5	58.40578	21.00
28	001200270000	SECTION 5	33.11846	12.00
29	001200340000	SECTION 5	6.59293	3.00
30	001200350010	SECTION 5	8.07849	4.00
31	001200370006	SECTION 5	2.53091	1.00
32	001200510000	SECTION 5	31.73340	11.00
33	001200620002	SECTION 5	5.17247	2.00
34	001200640000	SECTION 5	3.28766	1.00
35	001200700000	SECTION 5	47.20783	17.00
36	001200710000	SECTION 5	14.83784	7.00
37	001200820000	SECTION 5	14.78437	7.00
38	001201030000	SECTION 5	30.47415	11.00
39	001400390000	SECTION 5	9.32253	4.00
40	001400480000	SECTION 5	12.01042	6.00
41	001400560001	SECTION 5	2.67134	1.00
42	001400560002	SECTION 5	2.99011	1.00
43	001400560004	SECTION 5	2.34798	1.00
44	001400560007	SECTION 5	8.25584	4.00
45	001400560009	SECTION 5	4.40351	2.00
46	001400570000	SECTION 5	6.72353	3.00
47	001500290001	SECTION 5	3.00877	1.00
48	001500440000	SECTION 5	3.74882	1.00
49	37	SECTION 5	4.23910	2.00
		Total Section 5	**821.10000**	**343.00**
1	000400400000	SECTION 6	51.54978	19.00
2	000600210000	SECTION 6	59.50456	22.00
3	000600250002	SECTION 6	10.90359	4.00
4	000600250003	SECTION 6	11.40135	4.00
5	000600290000	SECTION 6	161.97596	59.00
6	000600290000	SECTION 6	161.97596	59.00
7	000600320000	SECTION 6	110.73118	40.00
8	000600400004	SECTION 6	12.68004	6.00
9	000600410023	SECTION 6	4.40445	2.00
10	000600410024	SECTION 6	2.76916	1.00
11	000600410032	SECTION 6	2.31708	1.00
12	000600410033	SECTION 6	6.08442	3.00
13	000600410034	SECTION 6	2.16769	1.00
14	000800620001	SECTION 6	2.52802	1.00
15	000800740000	SECTION 6	10.31789	5.00
16	000800750000	SECTION 6	5.01701	2.00
17	000800760002	SECTION 6	3.59471	1.00

18	000800760003	SECTION 6	3.83841	1.00
19	000900010000	SECTION 6	89.53258	33.00
20	000900150000	SECTION 6	5.99201	2.00
21	000900180000	SECTION 6	17.84007	8.00
22	000900190000	SECTION 6	16.08103	8.00
23	000900190000	SECTION 6	9.11320	4.00
24	000900200000	SECTION 6	53.27158	19.00
25	000900210000	SECTION 6	48.95824	18.00
26	000900230000	SECTION 6	132.08236	48.00
27	000900240000	SECTION 6	35.22850	13.00
28	000900290000	SECTION 6	23.12549	8.00
29	000900290000	SECTION 6	23.12549	8.00
30	000900320000	SECTION 6	23.04390	8.00
31	000900320000	SECTION 6	23.04390	8.00
32	000900320000	SECTION 6	23.04390	8.00
33	000900360000	SECTION 6	38.79700	14.00
34	000900560000	SECTION 6	18.68537	9.00
35	000900560000	SECTION 6	18.68537	9.00
36	000900790001	SECTION 6	2.62920	1.00
37	000900790013	SECTION 6	2.07611	1.00
38	000900790025	SECTION 6	2.02860	1.00
39	32	SECTION 6	2.56724	1.00
		Total Section 6	**1232.71240**	**460.00000**

Marginal Residential and Agricultural				
COUNT	**PID**	**SECTIONS**	**ACRES**	**ESTIMATED DU**
1	000200620002	SECTION 1	2.37406	1.00
2	000200660000	SECTION 1	2.44743	1.00
3	000200750000	SECTION 1	20.19440	2.00
4	000300280000	SECTION 1	8.10295	1.00
5	000300540000	SECTION 1	14.95190	2.00
6	000300550000	SECTION 1	30.97021	4.00
7	000300580000	SECTION 1	25.73053	3.00
8	000301390000	SECTION 1	5.15779	1.00
9	000500280000	SECTION 1	129.86287	19.00
10	000500380000	SECTION 1	7.74716	1.00
11	000500380001	SECTION 1	26.88134	3.00
12	000500400001	SECTION 1	13.67850	2.00
13	000500500000	SECTION 1	95.55929	14.00
14	000600020000	SECTION 1	6.38924	1.00
15	000600120000	SECTION 1	24.49707	3.00
16	000800370003	SECTION 1	5.88693	1.00
		Total Section 1	**420.43167**	**59.00**
1	000100230000	SECTION 2	213.83708	31.00

2	000100320000	SECTION 2	72.85427	10.00
3	000100490000	SECTION 2	38.78423	5.00
4	000100500000	SECTION 2	29.84011	4.00
5	000100530001	SECTION 2	3.05785	1.00
6	000100550000	SECTION 2	8.02537	1.00
7	000201210000	SECTION 2	181.10814	26.00
8	000201310000	SECTION 2	55.60219	8.00
9	000400070000	SECTION 2	8.99589	1.00
10	000400250001	SECTION 2	8.50149	1.00
11	000400320009	SECTION 2	12.41129	2.00
12	000400380000	SECTION 2	28.03975	4.00
13	000400630000	SECTION 2	12.09408	2.00
14	000500170000	SECTION 2	6.97235	1.00
		Total Section 2	**680.12409**	**97.00**
1	000400740000	SECTION 3	8.79216	1.00
2	000400740000	SECTION 3	8.22172	1.00
3	000700040000	SECTION 3	23.09169	3.00
4	000700190000	SECTION 3	22.49656	3.00
5	000700680000	SECTION 3	15.00019	5.00
6	000700750000	SECTION 3	2.66553	1.00
7	000801170000	SECTION 3	9.63982	1.00
8	001000250000	SECTION 3	2.05419	1.00
9	001000430000	SECTION 3	7.51412	1.00
10	12	SECTION 3	3.66203	1.00
		Total Section 3	**103.13801**	**18.00**
1	001000750000	SECTION 4	2.08331	1.00
2	001000770000	SECTION 4	118.00348	17.00
3	001000780000	SECTION 4	7.39633	1.00
4	001100200000	SECTION 4	49.81901	7.00
5	001100220000	SECTION 4	8.49881	1.00
6	001100380001	SECTION 4	3.28116	1.00
7	001100390000	SECTION 4	16.46389	3.00
8	001100400000	SECTION 4	7.75634	1.00
9	001100510000	SECTION 4	7.45311	1.00
10	001100510000	SECTION 4	8.21500	1.00
11	001100540000	SECTION 4	146.19306	21.00
12	001100620000	SECTION 4	3.09694	1.00
13	001300610000	SECTION 4	104.28895	15.00
14	001400010000	SECTION 4	96.81326	71.00
15	001400330000	SECTION 4	43.80933	6.00
16	001400330000	SECTION 4	43.80933	6.00
17	001400840000	SECTION 4	37.33407	5.00
18	001400950000	SECTION 4	2.77455	1.00
19	001400980000	SECTION 4	17.50557	3.00
20	001401190000	SECTION 4	5.76811	1.00
21	17	SECTION 4	4.90039	1.00
		Total Section 4	**735.26400**	**165.00**

1	000800840000	SECTION 5	73.39801	10.00
2	000800910000	SECTION 5	6.13550	1.00
3	000900410006	SECTION 5	17.52080	3.00
4	000900530000	SECTION 5	10.27407	2.00
5	000900540003	SECTION 5	5.89048	1.00
6	000900540004	SECTION 5	4.19444	1.00
7	001100780000	SECTION 5	4.66231	1.00
8	001100810000	SECTION 5	12.19759	2.00
9	001100820000	SECTION 5	4.58383	1.00
10	001101130000	SECTION 5	76.03251	11.00
11	001200470001	SECTION 5	13.54967	2.00
12	001200670000	SECTION 5	17.19085	3.00
13	001200680000	SECTION 5	10.04981	2.00
14	001200700001	SECTION 5	24.21413	3.00
15	001200780000	SECTION 5	2.12155	1.00
16	001200890000	SECTION 5	122.34147	18.00
17	001201050000	SECTION 5	25.44048	3.00
18	001400330000	SECTION 5	43.80933	6.00
19	001500180000	SECTION 5	8.00458	1.00
20	001500450000	SECTION 5	13.44256	2.00
21	001500510000	SECTION 5	20.96800	4.00
22	001500510002	SECTION 5	9.35369	1.00
23	001500630000	SECTION 5	17.38554	3.00
24	001500640000	SECTION 5	10.95917	2.00
		Total Section 5	**553.72037**	**84.00**
1	000500600000	SECTION 6	4.60062	1.00
2	000600330000	SECTION 6	131.67518	19.00
3	000600400002	SECTION 6	67.55991	10.00
4	000600400003	SECTION 6	2.56082	1.00
5	000600410006	SECTION 6	2.40703	1.00
6	000900060000	SECTION 6	73.91372	10.00
7	000900370000	SECTION 6	5.57683	1.00
		Total Section 6	**288.29411**	**43.00**